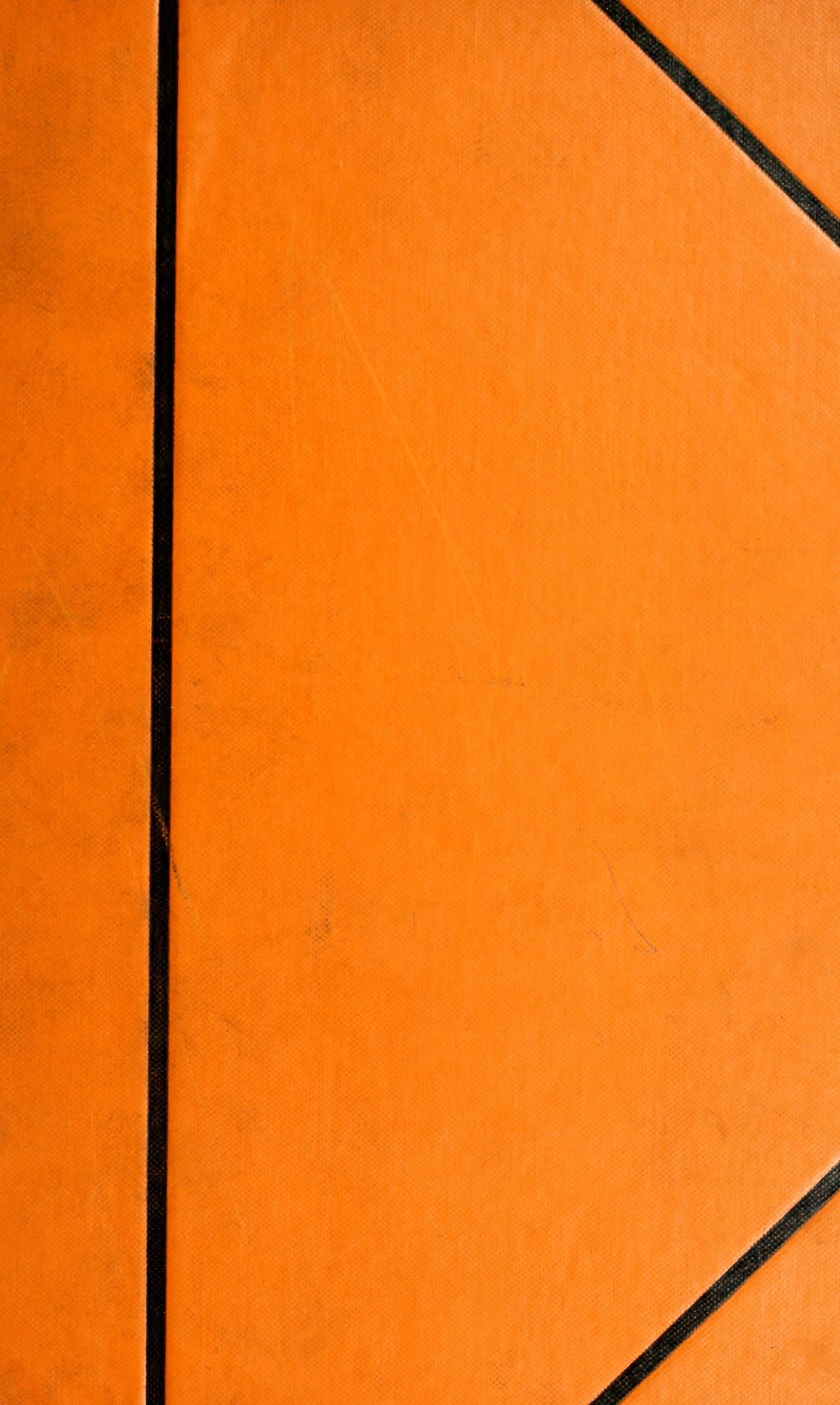




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OF THE

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CONTENTS OF VOLUME 1.

(This volume is bound in two parts).

1. Report of the Auditor General, for the fiscal year ended 30th June, 1906. Partial report presented 9th January, 1907, by Hon. W. S. Fielding; also 4th February; 7th February; 21st February; 22nd February, 1st March.....*Printed for both distribution and sessional papers.*

CONTENTS OF VOLUME 2.

2. Public Accounts of Canada, for the fiscal year ended 30th June, 1906. Presented 27th November, 1906, by Sir Wilfrid Laurier*Printed for both distribution and sessional papers.*
3. Estimates of the sums required for the services of Canada for the year ending 31st March, 1908. Presented 29th November, 1906, by Hon. W. S. Fielding.
Printed for both distribution and sessional papers.
- 3*a*. Supplementary Estimates for the fiscal period of nine months ending 31st March, 1907. Presented 22nd January, 1907, by Hon. W. S. Fielding.....*Printed for both distribution and sessional papers.*
4. Further Supplementary Estimates for the period of nine months ending on the 31st March, 1907. Presented 2nd April, 1907, by Hon. W. S. Fielding....*Printed for both distribution and sessional papers.*
5. Supplementary Estimates for the year ending 31st March, 1908. Presented 19th April, 1907, by Hon. W. S. Fielding.....*Printed for both distribution and sessional papers.*
- 5*a*. Further Supplementary Estimates for the year ending 31st March, 1908. Presented 25th April, 1907, by Hon. W. S. Fielding... ..*Printed by both distribution and sessional papers.*
6. List of Shareholders in the Chartered Banks of Canada, as on the 31st December, 1906. Presented 25th April, 1907, by Hon. W. S. Fielding.....*Printed for both distribution and sessional papers.*

CONTENTS OF VOLUME 3.

7. Report of dividends remaining unpaid, unclaimed balances and unpaid drafts and bills of exchange in Chartered Banks of Canada, for five years and upwards, prior to December 31, 1906.
Printed for both distribution and sessional papers.
8. Report of the Superintendent of Insurance for the year ended 31st December, 1906.
Printed for both distribution and sessional papers.
9. Abstract of Statements of Insurance Companies in Canada, for the year ended 31st December, 1906.
Printed for both distribution and sessional papers.

CONTENTS OF VOLUME 4.

10. Report of the Department of Trade and Commerce, for the fiscal year ended 30th June, 1906. Part I.—Canadian Trade. Presented 11th February, 1907, by Hon. W. Paterson.
Printed for both distribution and sessional papers.
- 10*a*. Report of the Department of Trade and Commerce, for the year ended 30th June, 1906. Part II.—Trade of Foreign Countries and Treaties and Conventions.
Printed for both distribution and sessional papers.

CONTENTS OF VOLUME 5.

- 11.** Tables of the Trade and Navigation of Canada, for the fiscal year ended 30th June, 1906. Presented 27th November, 1906, by Sir Wilfrid Laurier.....*Printed for both distribution and sessional papers.*
- 12.** Inland Revenues of Canada. Excise, &c., for the fiscal year ended 30th June, 1906. Presented 18th December, 1906, by Hon. W. Templeman.....*Printed for both distribution and sessional papers.*
- 13.** Inspection of Weights, Measures Gas and Electric Light, for the fiscal year ended 30th June, 1906. Presented 27th November, 1906, by Hon. W. Templeman.
Printed for both distribution and sessional papers.

CONTENTS OF VOLUME 6.

- 14.** Report on Adulteration of Food, for the fiscal year ended 30th June, 1906. Presented 3rd April, 1907, by Hon. W. Templeman.....*Printed for both distribution and sessional papers.*
- 15.** Report of the Minister of Agriculture, for five months ended 31st March, 1906. Presented 27th November, 1907, by Hon. S. A. Fisher.....*Printed for both distribution and sessional papers.*
- 16.** Report of the Directors and Officers of the Experimental Farms, from 1st December, 1905, to 31st March, 1906. Presented 27th November, 1906, by Hon. S. A. Fisher.
Printed for both distribution and sessional papers.
- 17.** Criminal Statistics for the year ended 30th September, 1906.
Printed for both distribution and sessional papers.
- 17a.** Census of the Northwest Provinces, Manitoba, Saskatchewan and Alberta, 1906. Presented 7th February, 1907, by Hon. S. A. Fisher..... *Printed for both distribution and sessional papers.*
- 17b.** Return of By-elections for the House of Commons of Canada, held during the year 1906. Presented 15th April, 1907, by Hon. W. S. Fielding.....*Printed for both distribution and sessional papers.*

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- 18.** Report on Canadian Archives, 1906.*Printed for both distribution and sessional papers.*
- 19.** Report of the Minister of Public Works, for the fiscal year ended 30th June, 1906. Presented 21st January, 1907, by Hon. S. A. Fisher.....*Printed for both distribution and sessional papers.*

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- 19a.** Reports of the International Waterways Commission, 1906.
Printed for both distribution and sessional papers.
- 20.** Annual Report of the Department of Railways and Canals, for the fiscal year ended 30th June, 1906. Presented 9th January, 1907, by Hon. H. R. Emmerson.
Printed for both distribution and sessional papers.
- 20a.** Canal Statistics for the season of navigation, 1905..*Printed for both distribution and sessional papers.*
- 20b.** Railway Statistics of Canada for the year ended 30th June, 1906. Presented 21st February, 1907, by Sir Wilfrid Laurier.... *Printed for both distribution and sessional papers.*
- 20c.** First Report of the Board of Railway Commissioners for Canada. February 1st, 1904, to March 31st, 1906. Presented 14th March, 1907, by Hon. H. R. Emmerson.
Printed for both distribution and sessional papers.

CONTENTS OF VOLUME 9.

- 21.** Report of the Department of Marine and Fisheries (Marine), for the year ended 30th June, 1906. Presented 11th March, 1907, by Hon. W. S. Fielding.
Printed for both distribution and sessional papers.
- 21a.** (No issue for 1906).
- 21b.** List of Shipping issued by the Department of Marine and Fisheries, being a list of vessels on the registry books of Canada on the 31st December, 1906.
Printed for both distribution and sessional papers.

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- 22.** Report of the Department of Marine and Fisheries (Fisheries), for the fiscal year ended 30th June, 1906. Presented 27th November, 1906, by Sir Wilfrid Laurier.
Printed for both distribution and sessional papers.
- 22a.** Further contributions to Canadian Biology, being studies from the Marine Biological Station of Canada, 1902-1906. *Printed for both distribution and sessional papers.*
- 23.** Report of the Harbour Commissioners, &c., 1906. *Printed for both distribution and sessional papers.*

CONTENTS OF VOLUME 10.

- 24.** Report of the Postmaster General, for the year ended 30th June, 1906. Presented 27th November, 1906, by Sir Wilfrid Laurier. *Printed for both distribution and sessional papers.*
- 25.** Annual Report of the Department of the Interior, for the fiscal year ended 30th June, 1906. Presented 9th January, 1907, by Hon. F. Oliver. *Printed for both distribution and sessional papers.*
- 25a.** Interim Report of the Commissioner of the Yukon Territory, December, 1906.
Printed for both distribution and sessional papers.
- 25b.** Report of the Surveyor General of Dominion Lands, for the year ended 30th June, 1906.
Printed for both distribution and sessional papers.

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- 26.** Summary Report of the Geological Survey Department, for the calendar year 1906. Presented 16th January, 1907, by Hon. S. A. Fisher. *Printed for both distribution and sessional papers.*
- 26a.** Annual Report of the Mineral Industries of Canada, 1905. Section of Mines.
Printed for both distribution and sessional papers.
- 26b.** Report on the Cascade Coal Basin, Alberta. *Printed for both distribution and sessional papers.*
- 27.** Annual Report of the Department of Indian Affairs, for the fiscal year ended 30th June, 1906. Presented 9th January, 1907, by Hon. F. Oliver. *Printed for both distribution and sessional papers.*
- 28.** Report of the the Royal Northwest Mounted Police, 1906. Presented 22nd February, 1907, by Sir Wilfrid Laurier. *Printed for both distribution and sessional papers.*

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- 29.** Report of the Secretary of State of Canada, for the year ended 31st December, 1906. Presented 25th April, 1907, by Hon. W. S. Fielding. *Printed for both distribution and sessional papers.*
- 29a.** Minutes of the proceedings in Conference between Members of the Government and of the various Provincial Governments, assembled at Ottawa, October, 1906. Presented 9th January, 1907, by Sir Wilfrid Laurier. *Printed for both distribution and sessional papers.*
- 30.** Civil Service List of Canada, 1906. Presented 14th January, 1907, by Sir Wilfrid Laurier.
Printed for both distribution and sessional papers,
- 31.** Report of the Board of Civil Service Examiners, for the year ended 31st December, 1906. Presented 24th April, 1907, by Hon. W. S. Fielding. *Printed for both distribution and sessional papers.*
- 32.** Annual Report of the Department of Public Printing and Stationery, for the year ended 30th June, 1906. Presented 15th April, 1907, by Hon. W. S. Fielding.
Printed for both distribution and sessional papers.
- 33.** Report of the Joint Librarians of Parliament. Session of 1906-7. Presented 22nd November, 1906, by the Hon. The Speaker. *Printed for sessional papers.*
- 34.** Report of the Minister of Justice as to Penitentiaries of Canada, for the year ended 30th June, 1906. Presented 11th January, 1907, by Hon. A. B. Aylesworth.
Printed for both distribution and sessional papers.

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- 35.** Annual Report of the Militia Council of Canada, for the year ended 31st December, 1906. Presented 21st March, 1907, by Sir Frederick Borden. *Printed for both distribution and sessional papers.*
- 36.** Report of the Department of Labour, for the year ended 30th June, 1906. Presented 27th November, 1906, by Sir Wilfrid Laurier. *Printed for both distribution and sessional papers.*

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37. Return to an order of the House of Commons, dated 21st March, 1906, showing: How many horses were tested for glanders with malein in the provinces of Manitoba, Saskatchewan and Alberta, respectively, by officials of this government; names of owners of horses; name of official, and date of application in each case; date when the horses were destroyed, in each case; date the owners received compensation in each case; amount received by the respective owners, and the valuation in each case; the variations of temperature in each case, with the highest and lowest readings; number of cases quarantined, names of owners, and period of quarantine; number of cases where retested, and the result; number of cases slaughtered after being retested; compensation paid, names of the owners, and the amount paid to each; cases where horses were slaughtered after being tested, and the number of post-mortem investigations held, with the result in each case and the names of owners. Presented 27th November, 1907.—*Mr. Staples*. *Not Printed.*
38. The Canada Year Book, 1905. Presented 27th November, 1906, by Hon. S. A. Fisher. *Printed separately.*
39. Exchequer Court Rules (amended), General Order of 8th October, 1903. Presented 27th November, 1906, by Sir Wilfrid Laurier *Not printed.*
40. Statement showing the expenditure on account of Unforeseen Expenses from the 1st July, 1906, to the 22nd November, 1906, in accordance with the Appropriation Act of 1906. Presented 28th November, 1906, by Hon. W. S. Fielding. *Not printed.*
41. Statement of Superannuations and Retiring Allowances in the Civil Service during the year ended 31st December, 1906, showing name, rank, salary, service, allowance and cause of retirement of each person superannuated or retired, and also whether vacancy filled by promotion or by new appointment, and salary of any new appointee. Presented 28th November, 1906, by Hon. W. S. Fielding. *Not printed.*
42. Statement in pursuance of section 17 of the Civil Service Insurance Act, for the year ending 30th June, 1906. Presented 28th November, 1906, by Hon. W. S. Fielding. *Not printed.*
- 42a. Return to an address of the Senate, dated 14th March, 1907, for: 1. Copies of all regulations made by the Governor in Council under section 14, chapter 13, of the Act intituled: "The Civil Service Insurance Act." 2. The number of policies issued under the said Act, giving the dates of issue. 3. The names of the policy-holders. 4. The premiums paid annually or otherwise on each policy. 5. The total amount of the excess of the deduction from the salaries of said policy-holders on account of superannuation, and the deduction which would have been made had they not effected insurance under the said Act. 6. The total amount paid as death claims and the date of each payment. 7. The difference between the premiums paid, with the deduction made in excess, as stated in paragraph 5, as compared with losses through death claims with interest added at the rate of 3 per cent on the amount lost by the government under the operations of this Act up to the 1st of March instant. Presented 8th April, 1907.—*Hon. Mr. Ferguson*. *Not printed.*
43. Statement of Governor General's Warrants issued since the last session of parliament, on account of the fiscal year 1906-7. Presented 28th November, 1907, by Hon. W. S. Fielding. *Not printed.*
44. Report of the Dominion Government Expedition to Hudson Bay and the Arctic Islands on board the D. G. steamer *Neptune*, 1903-1904. Presented 28th November, 1906, by Hon. L. P. Brodeur. *Printed separately.*
45. Ordinances of the Yukon Territory, passed by the Yukon Council in the year 1906. Presented 28th November, 1906, by Sir Wilfrid Laurier. *Not printed.*
46. Report of the Commissioners of Internal Economy of the House of Commons, from 21st July, 1905, to 11th July, 1906, pursuant to No. 9, Rules of the House. Presented 30th November, 1906, by the Hon. The Speaker. *Not printed.*
47. The King's regulations and orders for the militia of Canada, 1906. Presented 3rd December, 1906, by Sir Frederick Borden *Not printed.*
48. Regulations for Ordnance Stores Services, 1905. Presented 3rd December, 1906, by Sir Frederick Borden. *Not printed.*

CONTENTS OF VOLUME 13—*Continued.*

49. Report of the International Waterways Commission upon the application of the Minnesota Canal and Power Company of Duluth, Minnesota, for permission to divert certain waters in the state of Minnesota from the boundary waters between the United States and Canada. Presented 3rd December, 1906, by Hon. S. A. Fisher. *Not printed.*
- 49a. Joint Report of the International Waterways Commission. November 15th, 1906. Presented 3rd December, 1906, by Hon. S. A. Fisher. *Not printed.*
- 49b. Report of the Canadian Section of the International Waterways Commission for the year 1906. Presented 23rd January, 1907, by Hon. S. A. Fisher. *Not printed.*
50. Tables of the population of the Northwest Provinces in 1901 and 1906. Presented 3rd December, 1906, by Hon. S. A. Fisher. *Not printed.*
51. A detailed statement of all bonds and securities registered in the Department of the Secretary of State of Canada, since last return, 20th March, 1906, submitted to the parliament of Canada under section 23, chapter 19, of the Revised Statutes of Canada. Presented 5th December, 1906, by Sir Wilfrid Laurier. *Not printed.*
52. Return under chapter 131 (R.S.C.), intituled: "An Act respecting Trade Unions," and submitted to parliament in accordance with section 23 of the said Act. Presented 5th December, 1906, by Sir Wilfrid Laurier. *Not printed.*
53. Return to an address of the House of Commons, dated 19th March, 1906, for copies of all orders in council and documents, between the first day of July, 1896, and the present time, relating to swamp lands; and of all letters, telegrams and other documents and correspondence between the government of Canada and the government of Manitoba, during the same period, relating to such lands. Presented 5th December, 1906.—*Mr. Staples.* *Not printed.*
- 53a. Supplementary return to No. 53. Presented 11th December, 1906. *Not printed.*
54. Return (in so far as the Department of the Interior is concerned) of copies of all orders in council, plans, papers, and correspondence which are required to be presented to the House of Commons, under a resolution passed on 20th February, 1882, since the date of the last return, under such resolution. Presented 5th December, 1906, by Hon. F. Oliver. *Not printed.*
55. Return to an order of the House of Commons, dated 28th November, 1906, showing the number of commercial agencies for the Dominion in operation during the fiscal years 1905 and 1906, the names of the several agents, where located, their salaries, contingent expenses, the total cost of each agency, and the aggregate cost of all the agencies combined. Presented 6th December, 1906.—*Mr. Wilson (Lennox and Addington).* *Not printed.*
56. Return of orders in council passed under provisions of the Dominion Lands Act, affecting lands in the Yukon Territory; and of orders or ordinances passed under the provisions of section 8 of the Yukon Territory Act, as that section was enacted by section 3 of chapter 34, 2 Edward VII. Presented 6th December, 1906, by Hon. F. Oliver. *Not printed.*
57. Return of orders in council, under the provisions of section 52 of the Northwest Irrigation Act. Presented 6th December, 1906, by Hon. F. Oliver. *Not printed.*
58. Return of orders in council which have been published in the *Canada Gazette* and in the *British Columbia Gazette*, between 20th January and 1st December, 1906, in accordance with provisions of subsection (d) of section 38 of the regulations for the survey, administration, disposal and management of Dominion lands within the 40-mile railway belt in the province of British Columbia. Presented 6th December, 1906, by Hon. F. Oliver. *Not printed.*
59. Return of orders in council which have been published in the *Canada Gazette* between 20th January and 1st December, 1906, in accordance with the provisions of clause 91 of the Dominion Lands Act, chapter 54, of the Revised Statutes of Canada, and its amendments. Presented 6th December, 1906, by Hon. F. Oliver. *Not printed.*
60. Return to an order of the House of Commons, dated 29th November, 1906, for a copy of the proclamations used in the elections of 1904, in the constituencies of Selkirk, Provencher, Macdonald, Lisgar, Marquette, Souris, Brandon and Portage la Prairie. Presented 10th December, 1906.—*Mr. Roche (Marquette).* *Not printed.*
61. Report of the Ottawa Improvement Commission for the fiscal year ended 30th June, 1906. Presented 10th December, 1906, by Hon. W. S. Fielding. *Not printed.*

CONTENTS OF VOLUME 13—*Continued.*

- 61a.** Orders in Council relative to the appointment of Commissioners under the provisions of chapter 10 of the Acts of 1899, intituled : "An Act respecting the city of Ottawa." Presented 28th January, 1907, by Sir Wilfrid Laurier. *Not printed.*
- 62.** Report of the Commissioners of the National Transcontinental Railway, under date of 9th October, 1906, on the surveys and other works under their charge for the year ended 30th June, 1906, in pursuance of subsection 2 of section 30, chapter 71, of 1903. Presented 10th December, 1906, by Hon. H. R. Emmerson. *Printed for both distribution and sessional papers.*
- 62a.** Return to an order of the House of Commons, dated 28th November, 1906, for a copy of all reports and plans of engineers regarding the line and location of the Grand Trunk Pacific Railway between the city of Quebec and Edmundston, New Brunswick, and more particularly the city of Quebec, and Lake Phœnegamook, in the county of Kamouraska. Presented 9th January, 1907.—*Mr. Monk.* *Not printed.*
- 62b.** Return to an address of the House of Commons, dated 28th November, 1906, for a copy of all orders in council, surveys, reports, documents, and papers of every kind not already brought down, touching, showing or relating to the route of the National Transcontinental Railway between the city of Quebec and the city of Moncton. Presented 9th January, 1907.—*Mr. Crocket* *Not printed.*
- 62c.** Return to an address of the House of Commons, dated 18th December, 1906, for a copy of all orders in council, advertisements for tenders, tenders, specifications of every kind, plans, drawings, reports, letters, telegrams, correspondence, contracts, agreements and other documents and papers of every kind, touching or relating to the construction of a section of the Transcontinental Railway designated as "District F," from a point at or near the city of Winnipeg, to a point known as Peninsular Crossing, near the junction point of the Fort William branch of the Grand Trunk Pacific Railway, a distance of about 245 miles. Presented 29th January, 1907.—*Mr. Borden (Carleton).* *Not printed.*
- 62d.** Return to an address of the House of Commons, dated 17th December, 1906, for a copy of all orders in council, advertisements for tenders, tenders, specifications of every kind, plans, drawings, reports, letters, telegrams, correspondence, contracts, agreements and other documents and papers of every kind, touching or relating to the construction of a section of the Transcontinental Railway, designated as "District B," beginning at the north end of the Quebec Bridge and Railway Company's bridge, in the vicinity of the city of Quebec, to a point near La Tuque, a distance of about 150 miles. Presented 29th January, 1907.—*Mr. Borden (Carleton).* *Not printed.*
- 62e.** Return to an order of the House of Commons, dated 6th February, 1907, for a copy of plans, documents, &c., now under consideration by the Transcontinental Commission and Railway Commission pertaining to the development and improvement of Quebec Harbour as a maritime port and railway terminus. Presented 25th February, 1907.—*Mr. Robitaille.* *Not printed.*
- 62f.** Return to an address of the House of Commons, dated 23rd January, 1907, for a copy of all papers, correspondence, reports, plans and profiles, and estimates of costs at any time received by or filed with the Commissioners of the National Transcontinental Railway, or with the Department of Railways, respecting : (a) That portion of the route of the said railway between the Quebec bridge and the vicinity of the Maine boundary line, as the route for such portion has been approved or adopted, or respecting any suggested variations of the location of such portion of the railway ; (b) respecting another suggested route for the said portion of the said railway between the points aforesaid, not passing by way of Lake Etchemin, and sometimes known as the Morin route. 2. For a copy of all orders in council approving, adopting, or respecting any such routes between the points aforesaid. Presented 26th February, 1907.—*Mr. Morin.* *Not printed.*
- 62g.** Return to an order of the House of Commons, dated 4th March, 1907, for a copy of all memoranda in the possession of the government, showing the amounts from month to month reported by the company and verified by the officers of the government, as having been duly expended in connection with the construction of the western division of the National Transcontinental Railway, whereon the government of Canada guarantees the bonds to the extent of 75 per cent of the cost. Presented 14th March, 1907.—*Mr. Ames.* *Not printed.*
- 62h.** Return to an order of the House of Commons, dated 24th April, 1907, for copies of papers in relation to the Transcontinental Railway route through New Brunswick. Presented 24th April, 1907.—*Hon. W. S. Fielding.* *Not printed.*

CONTENTS OF VOLUME 13—*Continued.*

- 63.** Return to an order of the House of Commons, dated 3rd December, 1906, showing what properties, if any, have been purchased by the government during the past two years, in the city of Ottawa, between Sussex Street and Mackenzie Avenue; the properties acquired by the government in that locality; the names of the vendors; the dates of the purchases, the price agreed upon in each case; the superficies of the property acquired; the date on which the government took possession in each case. Presented 11th December, 1906.—*Mr. Morin* *Not printed.*
- 64.** Return to an address of the House of Commons, dated 28th November, 1906, for a copy of all orders in council passed during the last three years, relating to the formation of any new territory or district, or the alteration of the boundaries of any territory or district in Canada. Presented 11th December, 1906.—*Mr. Sifton* *Not printed.*
- 64a.** Return to an address of the House of Commons, dated 28th November, 1906, for a copy of all letters, communications, memorials, petitions, or documents, received during the past three years from the government of any province in the Dominion, or any member thereof, by the government of Canada, or any member thereof, relating to the extension or alteration of the boundaries of any province of Canada. Presented 17th December, 1906.—*Mr. Sifton*.
Printed for both distribution and sessional papers.
- 65.** Return to an order of the House of Commons, dated 3rd December, 1906, for a copy of contracts with transatlantic steamship lines, in force during the season of 1906, that were entitled by such contract to receive bonuses or subventions from the government. Presented 11th December, 1906.—*Mr. Smith (Wentworth)* *Not printed.*
- 66.** Return to an order of the House of Commons, dated 28th November, 1906, for a copy of all letters, telegrams, correspondence, reports, documents and papers, with respect to filling the vacancy on the bench of the Supreme Court of Nova Scotia, occasioned by the appointment of Honourable D. C. Fraser to the office of Lieutenant Governor. Presented 14th December, 1906.—*Mr. Borden (Carleton)* *Not printed.*
- (66.** Sessional Papers of 1906). Evidence taken before the Royal Commission on Life Insurance. Presented 26th February, 1907, by Hon. W. S. Fielding *Printed for distribution.*
- 67.** Report of the Deputy Minister of Labour on negotiations conducted by him under Conciliation Act, 1903, in connection with the strike of coal miners in the employ of the Alberta Railway and Irrigation Company, which commenced on 9th March, 1906. Presented 14th December, 1906, by Hon. R. Lemieux *Not printed.*
- 68.** Return to an order of the House of Commons, dated 28th November, 1906, for a copy of all papers and correspondence in connection with the Buckingham strike and riots. Presented 14th December, 1906, by Hon. R. Lemieux *Not printed.*
- 68a.** Supplementary return to No. 68. Presented 9th January, 1907.—*Mr. Bourassa* *Not printed.*
- 68b.** Return to an address of the Senate, dated 23rd of January, 1907, for a copy of all papers and correspondence having reference to the calling out of militia and to the intervention of the government in the late strikes and riots in Hamilton and Buckingham; also giving a statement showing the amounts paid by the government and municipalities in each case, for the services of the militia in connection with strikes; together with a statement showing in which cases, if any, the government was recouped by the municipalities, the amount paid the militia, and the amounts. Presented 19th February, 1907.—*Hon. Mr. David* *Not printed.*
- 69.** Return to an order of the House of Commons, dated 3rd December, 1906, showing all, if any, islands or portions of islands sold since the first day of July, 1896, adjoining the townships of Baxter and Gibson, in the district of Muskoka, on the Georgian Bay, and the prices received therefor, respectively. Presented 17th December, 1906.—*Mr. Wright (Muskoka)* *Not printed.*
- 70.** Return to an order of the House of Commons, dated 29th November, 1906, for a copy of all circulars sent out by the immigration office during the present year to agents of the department in the United Kingdom, and on the continent of Europe; also to booking agents in the United Kingdom and on the continent. Presented 17th December, 1906.—*Mr. Chisholm (Huron)* *Not printed.*
- 70a.** Return to an order of the House of Commons, dated 5th December, 1906, for a copy of all papers, circulars, instructions, or other correspondence, sent out by the Department of the Interior, or any officer thereof, relative to immigration; and all correspondence or papers, &c., relative thereto, from agents abroad during the year 1906, with special reference to question No. 2, on the Order Paper of 3rd December, 1906. Presented 17th December, 1906.—*Mr. Lefurgey* *Not printed.*

CONTENTS OF VOLUME 13—*Continued.*

71. Return to an order of the House of Commons, dated 28th November, 1906, for a copy of all letters, documents, telegrams, reports, writs of super-sedeas, and other papers, relating to the standing and different grades in the civil service, from time to time, of Henry J. Morgan, and his superannuation. Presented 18th December, 1906.—*Mr. Stewart*.....*Not printed.*
72. Returned to an order of the House of Commons, dated 28th November, 1906, showing: 1. The names of fire insurance companies which have received their charters within the past five years. 2. The names of the parties applying for the same. 3. The amount of subscribed capital required under the charter. 4. The amount of paid-up capital required under the charter. 5. The proposed location of the head office in each case. Presented 17th December, 1906.—*Mr. Macdonell*.....*Not printed.*
73. Return to an order of the House of Commons, dated 3rd December, 1906, showing: quantity or value of green fruit, canned fruits, and vegetables, fruit jams, preserves and jellies, classifying them wherever practicable, imported into Canada, and exported therefrom, during each of the past ten years; stating also whether from Great Britain, United States, or other countries; and during the past two years, the quantity imported through ports of entry, first, in Eastern Provinces; second, Prairie Provinces; third, British Columbia. Presented 9th January, 1907.—*Mr. Smith (Wentworth)*.....*Not printed.*
74. Return to an order of the House of Commons, dated 17th December, 1906, showing: 1. The total amount of duty received by the government in the fiscal year 1906 upon the respective articles named in the following items, as numbered, of the new Customs Tariff, viz: Item 445.—Mowing machines, harvesters, self-binding or without binders, binding attachments, reapers. Item 446.—Cultivators, ploughs, harrows, horse-rakes, seed drills, manure-spreaders, weeders and wind-mills. Item 447.—Threshing machine outfit, when consisting of traction or portable engines and separators. Item 448.—Hay loaders, potato diggers, horse-powers, separators, n.o.p., wind-stackers, fodder or feed cutters, grain crushers, fanning mills, hay tedders, farm, road or field rollers, post-hole diggers, snaths, and other agricultural implements, n.o.p. Item 449.—Axes, scythes, sickles or reaping hooks, hay or straw knives, edging knives, hoes, rakes, n.o.p., and pronged forks. Item 450.—Shovel and spades, iron or steel, n.o.p., shovel and spade blanks, and iron or steel cut to shape for the same, and lawn mowers. Item 451.—Stoves of all kinds, for coal, wood, oil, spirits or gas. 2. The total amount of duty that would have been received in the same period, the fiscal year of 1906, had the tariff now proposed by the government been then in force, giving such duty for each of the items 445, 446, 447, 448, 449, 450 and 451, separately. Presented 9th January, 1907.—*Mr. Henderson*.....*Not printed.*
75. Report of the Commissioner, Dominion Police Force, for the year 1906. Presented 9th January, 1907, by Hon. A. B. Aylesworth.....*Not printed.*
76. Return to an order of the House of Commons, dated 10th December, 1906, for a copy of all writs, forms and instructions issued and used in and for the purposes of the elections for the constituency of London, in the year 1905, and for the elections for the constituencies of East Elgin and North Bruce, in the year 1906. Presented 9th January, 1907.—*Mr. Barker*.....*Not printed.*
77. Return to an order of the House of Commons, dated 18th April, 1906, for a copy of all petitions, memorials, reports, letters, documents, correspondence and papers, setting forth or relating or referring to the necessity of improved aids to navigation, and of the life-saving vessels or appliances on the Pacific coast. Presented 9th January, 1907.—*Mr. Borden (Carleton)*.....*Not printed.*
78. Return to an order of the House of Commons, dated 18th April, 1906, for a copy of all reports, findings and recommendations of any officer, court of inquiry or commission, respecting the loss of any steamship or vessel on the Pacific coast during the past six years, except such as have already been published in the Annual Report of the Department of Marine. Presented 9th January, 1907.—*Mr. Borden (Carleton)*.....*Not printed.*
79. Return to an order of the House of Commons, dated 21st March, 1906, showing: How many wrecks there were on the Pacific coast in Canadian waters in 1900, 1901, 1902, 1903, 1904, 1905, and in 1906, up to date, British and foreign; number of lives lost in each wreck; the total financial loss in ships and cargoes; the inquiries made by the government into the causes of such wrecks; the causes given for such wrecks; the results of reports made of such investigations, as to hulls or machinery, by the British Columbia inspectors; the port of registry of each vessel wrecked; the age of each ship. Presented 9th January, 1907.—*Mr. Smith (Nanaimo)*.....*Not printed.*

CONTENTS OF VOLUME 13—*Continued.*

80. Return to an order of the House of Commons, dated 10th December, 1906, showing : The quantity of oil from the wells of the Memramcook and Dover, sold and delivered to the Intercolonial Railway, between the 1st of January, 1904, and the 31st of March, 1906 ; such statement to set forth in detail the dates, quantity, price, and total value of each of such shipments. And further for a similar statement giving like information in respect of all other oil purchased from or through the agency of the New Brunswick Petroleum Company, being the output of other wells than those herein above specified. Presented 9th January, 1907.—*Mr. Barker*..... *Not printed.*
81. Return to an order of the House of Commons, dated 10th December, 1906, showing : All sums paid from 1st January, 1904, to date, to George H. Cochrane, of Moncton, for supplies furnished or services rendered the Intercolonial Railway ; such statement in respect of each item in every such transaction, when and by whom the order was given, nature of and the quantity of goods furnished, character of services rendered, prices paid, and the names of the parties who certified to the correctness of his account. Presented 9th January, 1907.—*Mr. Barker*..... *Not printed.*
82. Return to an order of the House of Commons, dated 18th December, 1906, giving comparative statement of the standard passenger tariff in force on the Intercolonial Railway in 1904, and that in force at the present time, said statement to be so arranged as to show the former and present passenger rates in convenient form for purposes of comparison, in each of the following cases : 1. From Truro (a) to Hopewell, to New Glasgow, to Pictou, to Antigonish, to Port Mulgrave, to Grand Narrows, to Sydney, to Glace Bay, to Louisburg ; (b) to Halifax, (c) to Londonderry, to Amherst, to Sackville, to Shediac, to Moncton, to Cape Tormentine. 2. From Moncton (a) to Salisbury, to Sussex, to Norton, to St. John ; (b) to Kent Junction, to Weldford, to Newcastle, to Dalhousie, to Campbellton. 3. From Lévis (a) to Berthier-en-bas, to St. Thomas de Montmagny, to Ste. Anne de la Pocatière, to River du Loup, to Rimouski, to Causapsal, to Metapedia ; (b) to Drummondville, to Ste. Rosalie, to Montreal. Presented 9th January, 1907.—*Mr. Ames*..... *Not printed.*
83. Return to an order of the House of Commons, dated 10th December, 1906, for a copy of all reports, investigations, orders, or correspondence, since 1st January, 1905, dealing with or touching upon alleged misconduct or remissions of duty on the part of (a) I. L. Burrill, paymaster on the Intercolonial Railway ; (b) Moses Tracey, inspector of car cleaners ; (c) Bruce McDougall, of the Intercolonial Railway Audit Office, Moncton ; together with a copy of the rules and regulations in force since above date, and at the present time, with reference to the employees of the Intercolonial Railway. Presented 9th January, 1907.—*Mr. Barker*..... *Not printed.*
84. Return to an order of the House of Commons, dated 23th November, 1906, for a copy of the report furnished to the government by Messieurs Brunet and Duff, of Montreal, regarding the water-powers on the Lachine Canal. Presented 9th January, 1907.—*Mr. Monk*..... *Not printed.*
85. Return to an order of the House of Commons, dated 10th December, 1906, showing, by means of a comparative statement, the difference in rates charged, in respect of the ten classes of articles most largely carried, under the standard freight tariff in force during 1904, and that in force at the present time upon the Intercolonial Railway, from station to station, as hereinafter specified : 1. From Truro (a) to Hopewell, to New Glasgow, to Pictou, to Antigonish, to Port Mulgrave, to Grand Narrows, to Sydney, to Glace Bay, to Louisburg ; (b) to Halifax ; (c) to Londonderry, to Amherst, to Sackville, to Shediac, to Moncton, to Cape Tormentine. 2. From Moncton (a) to Salisbury, to Sussex, to Norton, to St. John ; (b) to Kent Junction, to Weldford, to Newcastle, to Dalhousie, to Campbellton. 3. From Lévis (a) to Berthier-en-bas, to St. Thomas de Montmagny, to Ste. Anne de la Pocatière, to River du Loup, to Rimouski, to Causapsal, to Metapedia ; (b) to Drummondville, to Ste. Rosalie, to Montreal. Presented 9th January, 1907.—*Mr. Ames*..... *Not printed.*
86. Return of all lands sold by the Canadian Pacific Railway Company, from the 1st October, 1905, to the 1st October, 1906. Presented 9th January, 1907, by Hon. F. Oliver..... *Not printed.*
87. Return to an order of the House of Commons, dated 5th December, 1906, for a copy of all documents relating to the application of R. C. McCracken for the northeast quarter, section 36, township 35, range 16, west of the second meridian, province of Saskatchewan ; also Mr. McCann, for the northwest quarter of the same section. Presented 9th January, 1907.—*Mr. Barr*..... *Not printed.*
88. Return to an order of the House of Commons, dated 17th December, 1906, showing : 1. The names, ages, sexes and parentage of children attending Muscoweguan's Indian boarding school, specifying whether treaty or non-treaty Indians, the band they belong to, and whether parents alive or not. 2. Amount of government grants made to the school during the years 1904, 1905 and 1906. 3.

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Amount of treaty money paid to Muscoweguan's band at the last payments, to what Indians were the payments made, and the number of children belonging to each. Presented 9th January, 1907.—*Mr. Lake* *Not printed.*

- 89.** Return to an order of the House of Commons, dated 5th December, 1906, for: 1. A copy of the evidence taken at the investigation promised by the Minister of the Interior at the last session of parliament into the conduct of W. T. R. Preston, Commissioner of Immigration in England; together with copies of all letters, documents, and papers, in any way relating thereto. 2. Copy of the report of the party or parties who held the investigation which was promised by the Honourable Mr. Oliver, Minister of the Interior, when the matter of the dismissal of Mr. W. T. R. Preston was under discussion at the last session of parliament. 3. Of all correspondence between W. T. R. Preston and any member of the government, or any department thereof, with reference to his present appointment. 4. And showing what government position W. T. R. Preston now holds, what his duties are, what salary he gets, what living and travelling expenses he is allowed. Presented 9th January, 1907.—*Mr. Wilson (Lennox and Addington)* *Not printed.*
- 90.** Return to an address of the House of Commons, dated 28th November, 1906, for a copy of all orders in council, agreements, valuations, reports, memoranda, letters, telegrams, correspondence and other documents and papers, touching, relating to or concerning the grant by or on behalf of the government of Canada, of any lands in Southern Alberta, under conditions contemplating or requiring the construction of irrigation works, and all such documents as aforesaid relating to any concession or grant of about 380,575 acres of land to the Robins Irrigation Company. Presented 9th January, 1907.—*Mr. Borden (Carleton)* *Not printed.*
- 90a.** Return to an address of the House of Commons, dated 28th November, 1906, for a copy of all orders in council, agreements, papers and correspondence in connection with the sale of 380,600 acres, more or less, of land in Southern Alberta, to the Robins Irrigation Company; and the list of shareholders of the company, and its officers. Presented 10th January, 1907.—*Mr. Borden (Carleton)*.
Not printed.
- 90b.** Return to an order of the House of Commons, dated 3rd December, 1906, for a copy of all documents relating to the application of, (a) J. T. Robins, for land in townships 10, 11 and 12, ranges 7, 8, 9, 10, 11, 12, west of the 4th; and of (b) E. H. Cuthbertson, for land in townships 11, 12, 13, ranges 7, 8, 9, 10, 11 and 12, west of the 4th, for purposes of irrigation. Presented 10th January, 1907.—*Mr. Ames*. *Not printed.*
- 91.** Return to an address of the House of Commons, dated 3rd December, 1906, for a copy of all orders in council, leases, agreements, valuations, reports, memoranda, letters, telegrams, correspondence, and other documents and papers, relating to, (a) the granting of grazing lease No. 2013, issued to J. D. McGregor, and of grazing lease No. 2014, issued to A. E. Hitchcock; (b) the assignment of said lease privileges to, or the enjoyment of the same, by the Grand Forks Cattle Company; (c) and further transfer or sale of said privileges by the Grand Forks Cattle Company; (d) all transactions between the government and the assigns of the Grand Forks Cattle Company. Presented 9th January, 1907.—*Mr. Ames*. *Not printed.*
- 91a.** Return to an address of the House of Commons, dated 3rd December, 1906, for a copy of all orders in council, leases, agreements, valuations, reports, memoranda, letters, telegrams, correspondence, and other documents and papers, touching, relating to, or concerning, (a) the granting of grazing lease No. 2009, issued to C. E. Hall; (b) the enjoyment of said lease privileges by C. E. Hall; (c) the assignment of the same to the Milk River Cattle Company; (d) the enjoyment of the same by the Milk River Cattle Company; together with a statement showing all amounts received by the government by way of rentals, bonuses, or otherwise, from each of the parties herein above-mentioned, with date, amount, and object of each such payment. Presented 9th January, 1907.—*Mr. Ames*.
Not printed.
- 91b.** Return to an address of the House of Commons, dated 3rd December, 1906, for a copy of all orders in council, leases, agreements, valuations, reports, memoranda, letters, telegrams, correspondence, and other documents and papers, touching, relating to, or concerning, (a) the granting of grazing lease No. 2059, issued to H. P. Brown, of Grand Forks, Montana; (b) the assignment of said lease privileges to the Galway Horse and Cattle Company; and the enjoyment thereof by said company; (c) the further assignment of said lease privileges by the Galway Horse and Cattle Company to John Cowdry, of Macleod, and his enjoyment of the same, together with a statement showing all rentals or bonuses received by the government from any of the above parties, with date, amount, and purpose of each payment. Presented 9th January, 1907.—*Mr. Ames*. *Not printed.*

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- 91c.** Return to an address of the House of Commons, dated 9th January, 1907, for a copy of all orders in council, agreements, valuations, reports, memoranda, letters, telegrams, correspondence and documents of every description, relating to or treating of (a) the granting of a closed grazing lease to Brown, Beddingfield, *et al*; (b) the enjoyment of and the payment for the privileges granted under said lease. Presented 7th February, 1907.—*Mr. Ames*.....*Not printed.*
- 91d.** Return to an order of the House of Commons, dated 23rd January, 1907, for a copy of all applications for the lease of grazing lands within the provinces of Alberta and Saskatchewan, between the 1st day of February, 1905, and the 1st day of August, 1905. Presented 19th April, 1907.—*Mr. McCarthy (Calgary)*.....*Not printed.*
- 92.** Return to an order of the House of Commons, dated 28th November, 1906, showing: 1. All sums of money paid to the North Atlantic Trading Company, or on their order, to 1st November, 1906, with dates, sums, and names of persons to whom paid. 2. All correspondence between the North Atlantic Trading Company and the government, or any member thereof, or any department, since 1st January, 1906. Presented 9th January, 1907.—*Mr. Wilson (Lennox and Addington)* ..*Not printed.*
- 92a.** Return to an order of the House of Commons, dated 17th December, 1906, showing: 1. All claims made on the government by the North Atlantic Trading Company, since the 31st March, 1906. 2. All amounts paid to the said North Atlantic Trading Company by the government of Canada, (a) on account of bonuses; (b) on account of disbursements, since the 31st March, 1906. 3. A copy of all correspondence had by the government with the said North Atlantic Trading Company since the 31st March, 1906, up to the 1st December, 1906, and of all letters and accounts received from the said company between the above dates. Presented 15th January, 1907.—*Mr. Monk*....*Not printed.*
- 92b.** Report of C. H. Beddoe, accountant of the Department of the Interior, of an audit of the books and accounts of the North Atlantic Trading Company. Presented 1st March, 1907, by Hon. F. Oliver.
Printed for both distribution and sessional papers.
- 92c.** Extract from a Report of the Privy Council, approved by the Governor General on the 19th February, 1907, respecting continental immigration and certain commissions to steamship booking agents. Presented 14th March, 1907, by Hon. F. Oliver.....*Not printed.*
- 93.** Return to an order of the House of Commons, dated 10th December, 1906, showing: All sums paid or credits given by the Record Foundry Company, of Moncton, in respect of purchases from the Inter-colonial Railway of scrap iron, copper, babbitt metal, lead, sheet lead, and scrap metal of every description, between 1st January, 1904, and 31st March, 1906; said statement to further show date and amount of every such transaction, character, quantity and price per pound, of material purchased and whether and in what instances the same has been offered in public competition or sale by tender. Presented 9th January, 1907.—*Mr. Barker*.....*Not printed.*
- 94.** Return to an order of the House of Commons, dated 14th May, 1906, for a copy of all correspondence, reports, documents and papers relating to any dealings, transactions or negotiations between the government and any company, association, syndicate, or any person or persons on behalf of any company, association or syndicate, who have purchased or acquired, or arranged to purchase or acquire, public lands from the government since 1898; also a statement giving the names, head offices and addresses of the said respective companies, associations and syndicates, together with the amount of land purchased, acquired, or arranged to be purchased or acquired, and the price paid or agreed upon; also a statement giving the names, addresses and occupations of any person or persons, other than companies, associations or syndicates, who have purchased or acquired, or arranged to purchase or acquire, public lands from the government since 1st January, 1898, in areas of more than 160 acres in each instance, and a statement of the area of such lands in each instance; also a copy of all correspondence with such persons, and all documents and papers relating to the sale or disposal of such lands. Presented 10th January, 1907.—*Mr. Borden (Carleton)*.....*Not printed.*
- 95.** Return to an address of the House of Commons, dated 18th December, 1906, for a copy of all orders in council, instructions, reports, letters, telegrams, correspondence and other papers of every kind relating to the negotiations for the Songhees Indian Reserve, and especially all such papers as aforesaid relating to the recent mission of Mr. Pedley, Deputy Superintendent General of Indian Affairs, to the province of British Columbia. Presented 11th January, 1907.—*Mr. Borden (Carleton)*.....*Not printed.*
- 96.** Return to an order of the House of Commons, dated 10th December, 1906, showing the following data: (1) The name of the present homesteader on southeast quarter, section 12, township 30, range 2, west of 5th meridian; (2) date of his entry; (3) by whom it was made; (4) where was it

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made; (5) who was the first to make homestead entry therefor; (6) by whom was the first entry cancelled; (7) who was the next applicant, and what was the date of the application; (8) the names of any other applicants, if any, for this homestead, and the dates of application; all correspondence in regard to this quarter-section. Presented 11th January, 1907.—*Mr. Hughes (Victoria).*

Not printed.

- 97.** Return to an order of the House of Commons, dated 9th May, 1906, showing in detail for each year, from 1886 to 1906, inclusive; 1. A statement of all goods supplied to Mr. Speaker's apartments, and to the various offices and apartments of the House of Commons, and the amounts paid therefore. 2. All inventories of goods in Mr. Speaker's apartments, and in the various offices and apartments of the House of Commons, taken by the Sergeant-at-Arms, as keeper of the furniture and fittings of the House, or other officers of the House, and any report of the Clerk, Sergeant-at-Arms, or other officer of the House, with reference thereto, the goods supplied, their condition, and the character and disposition of the same. 3. A copy of all correspondence had between Mr. Speaker and any member of the Internal Economy Commission, the Clerk of the House, the Sergeant-at-Arms, or any other officer of the House of Commons, and the Auditor General, in reference to the purchase, payment, checking, distribution, replenishing, disposal, condition and character of the same. 4. A copy of all resolutions passed by the Commission of Internal Economy in reference to the above matters. Presented 11th January, 1907.—*Mr. Belcourt.* *Not printed.*
- 98.** Return to an address of the Senate, dated 5th June, 1906, for: 1. A copy of the petitions signed by the citizens of Quebec protesting against the choice of the place where Sir Charles Ross has built his rifle factory. 2. A copy of the petitions sent by certain persons asking the government to increase the land placed at the disposition of Sir Charles Ross. 3. A copy of the plan of the land placed at the disposition of Sir Charles Ross. 3. A copy of the plan of the land leased by the government to Sir Charles Ross for the purpose of his rifle factory. Presented 6th December, 1906.—*Hon. Mr. Landry.* *Not printed.*
- 98a.** Return to an order of the House of Commons, dated 23rd January, 1907, for copies of all documents and all correspondence concerning the erection of the Ross rifle factory on the Plains of Abraham, Quebec. Presented 14th March, 1907.—*Mr. Laverne (Montmagny).* *Not printed.*
- 98b.** Return to an address of the House of Commons, dated 10th December, 1906, for a copy of all contracts between the Ross Rifle Company and the government, or Department of Militia, for the supply of rifles, ammunition or other articles, and all orders in council, correspondence, reports, documents and papers, relating to such contracts, or to the subject-matter thereof, and to the operations of the company and its dealings with the government, or any department thereof, including the Department of Customs. Presented 14th March, 1907.—*Mr. Worthington.* *Not printed.*
- 98c.** Return to an address of the Senate, dated 27th November, 1906, for a copy of all correspondence exchanged between the government and the Ross Rifle Company or any other association or military body or any person whomsoever, or between the various departments of the government on the subject of the Ross rifle, of the inspections which it has undergone, of the improvements which have been suggested, of the complaints which have been made, or of the reports which have been made. Presented 13th March, 1907.—*Hon. Mr. Landry.* *Not printed.*
- 98d.** Supplementary return to No. 98b. Presented 3rd April, 1907. *Not printed.*
- 98e.** Supplementary return to No. 98c. Presented (Senate) 4th April, 1907. *Not printed.*
- 99.** Revised Statutes of Canada, 1906, volumes 1, 2 and 3. Presented 14th January, 1907, by Hon. A. B. Aylesworth. *Printed separately.*
- 100.** Return to an order of the House of Commons, dated 9th January 1907, showing: The imports by provinces into Canada for home consumption, from the United States, and the exports of the same from Canada to the United States, and the duty on the same, giving the present Canadian duty and the United States duty, for the past twelve months, ending 1st October, 1906, on the following agricultural articles: Live pork, cattle, horses, beef and pork dressed, beans, corn, barley, buckwheat, peas, wheat, sugar, beets, eggs, hay, butter, cheese, apples, evaporated or otherwise, vegetables, green peas, tomatoes, peaches, plums, pears, including all canned vegetables, and lard, and tobacco, raw. Presented 15th January, 1907.—*Mr. Clements.* *Not printed.*
- 101.** Return to an order of the House of Commons, dated 5th December, 1906, for a copy of all correspondence between the Marine Department and the provincial government of British Columbia, or any member thereof, concerning the building of a road or trail along the coast line of Vancouver Island, for the purpose of lending assistance to distressed mariners. Presented 15th January, 1907.—*Mr. Smith (Nanaimo).* *Not printed.*

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- 102.** Return to an order of the House of Commons, dated 5th December, 1906, for a copy of all correspondence and papers in connection with the investigation into the provisioning of government steamer *Kestrel*, during the year 1905, and a copy of the report of the investigation. Presented 15th January, 1907.—*Mr. Foster* *Not printed.*
- 102a.** Return to an order of the House of Commons, dated 14th January, 1907, for a copy of all letters, telegrams, reports, memoranda and other documents and papers, respecting supplies purchased or ordered for or in connection with the government steamer *Kestrel*, from January 1st, 1903, up to the present time, including all correspondence between any department, officer or agent of the government, and the captain of the said steamer. Presented 12th April, 1907.—*Mr. Reid (Grenville)*.
..... *Not printed.*
- 103.** Return to an order of the House of Commons, dated 10th December, 1906, showing the local and general tariffs of each and every through transportation line, railway or steamship line, giving in detail the rates upon each class of commodity from station to station; and also upon commodities passing through Canada, or from Canada to foreign countries, or to Great Britain and Ireland. Presented 17th January, 1907.—*Mr. Hughes (Victoria)*..... *Not printed.*
- 104.** Return to an order of the House of Commons, dated 3rd December, 1906, showing for five years past the annual shipments across the Atlantic of: butter, cheese, apples, pears, other fruits and other products, classifying them (a) in cold storage; (b) in cool air compartments; (c) in ordinary storage. Presented 17th January, 1907.—*Mr. Smith (Wentworth)*..... *Not printed.*
- 105.** Return to an address of the House of Commons, dated 28th November, 1906, for a copy of all orders in council, reports, letters, telegrams, correspondence, memoranda and other documents and papers, relating to or in any way touching the purchase or acquisition of land in or near the city of Halifax, since 1st January, 1902, for the purpose of constructing thereon a round-house or machine shop. Presented 17th January, 1907.—*Mr. Barker*..... *Not printed.*
- 106.** Return to an address of the Senate, dated 19th June, 1906, for copies of all correspondence between the Imperial authorities and the government of Canada relating to the uniform to be worn upon state occasions by privy councillors of the cabinet, privy councillors not of the cabinet, deputy heads of departments, and by any other of the government officials. Presented 16th January, 1907.—*Hon. Mr. Landry*..... *Not printed.*
- 107.** Return to an address of the Senate, dated 7th December, 1906, for copies of all correspondence respecting a site or sites for a public building in the town of Glace Bay, Nova Scotia, between any member of the government and all other parties; the area of the sites, the price of each, the date of the purchase, the date of each payment, the name of the seller of each site, the report or reports of the government engineer, showing lots recommended and those not recommended by him, and all notes or memoranda referring to said sites. Presented 16th January, 1907.—*Hon. Mr. McDonald (Cape Breton)*..... *Not printed.*
- 108.** Return to an address of the Senate, dated 5th December, 1906, for a copy of all the correspondence exchanged between the department of marine and fisheries, or any person or any company whatsoever on the subject of the stranding at Matane of the steamer *Kensington*, as well as of the inquiry which has been made into this subject and of the judgment rendered by the commissioner making the inquiry. Presented 16th January, 1907.—*Hon. Mr. Landry*..... *Not printed.*
- 109.** Return to an address of the Senate, dated 28th November, 1906, of imports of oxide of aluminum for the years 1903, 1904, 1905 and to date, 1906, with values. Presented 16th January, 1907.—*Hon. Mr. Donville*..... *Not printed.*
- 109a.** Return to an order of the Senate, dated 28th November, 1906, giving the amount of aluminum exported for the years 1903, 1904, 1905 and to date, 1906, with values. Presented 16th January, 1907.—*Hon. Mr. Donville*..... *Not printed.*
- 110.** Supplementary return to an order of the House of Commons, dated 14th March, 1906, showing, in the case of every homestead against which, during the years 1904 and 1905, a report of non-compliance with the law, or a demand for cancellation has been received by the Dominion land office or offices; giving (a) the location of said quarter-section, range, township, and meridian; (b) the name and address of the party by whom the original entry was made; (c) the name and address of the party or parties (if there have been several) who endeavoured to lodge cancellations; (d) the reason alleged by complainants why cancellation of entry should be allowed; (e) whether warning of threatened cancellation was served upon the alleged delinquent; (f) the action taken by the department in each case. Presented 21st January, 1907.—*Mr. Ames*..... *Not printed.*

CONTENTS OF VOLUME 13—*Continued.*

- 111.** Return to an address of the House of Commons, dated 10th December, 1906, for a copy of all orders in council, agreements, contracts, reports, telegrams, letters, and other documents, relating to any agreement between the government, or any department of the government, and Mr. W. A. D. Lees, or any other person or persons, for fencing a part or tract of land near Fort Saskatchewan, in Alberta; and all such documents and papers aforesaid, relating to the maintenance of such fence. Presented 21st January, 1907.—*Mr. Roche (Marquette)*..... *Not printed.*
- 112.** Return to an order of the House of Commons, dated 17th December, 1906, for a copy of the ordinance or regulation of the Canadian militia by which young men following the three months' short course, day attendance, are stipulated as having no right to any indemnity for their services; also a copy of the ordinance or regulation of the Canadian militia by which young men from the country are not entitled to any pay for provisionary course, night attendance. Presented 21st January, 1907.—*Mr. Robitaille*..... *Not printed.*
- 113.** Extract from a Report of the Committee of the Privy Council, approved by the Governor General on the 24th day of December, 1906, in relation to the leasing of the Beauharnois Canal, in order to its utilization for the development of electricity for lighting and industrial purposes. Presented 21st January, 1907, by Sir Wilfrid Laurier..... *Not printed.*
- 114.** Return to an order of the House of Commons, dated 14th January, 1907, showing: 1. All amounts which have been since 1st July, 1904, expended, chargeable to capital account, upon the strengthening of bridges along the line of the government railways. 2. The estimated cost of each work, which it is proposed to carry on during the fiscal year 1907-8. Presented 21st January, 1907.—*Mr. Crockett*..... *Not printed.*
- 115.** Return to an order of the House of Commons, dated 14th January, 1907, for a copy of all correspondence, petitions and other papers, addressed to, or received by the department of railways and canals, from any persons, organizations, or associations, asking for the institution of a system of annuities for employees on the Intercolonial Railway. Presented 21st January, 1907.—*Mr. Macdonald*..... *Not printed.*
- 116.** Return to an order of the House of Commons, dated 26th March, 1906, for a statement containing the following information concerning the water-powers in the possession and under the control of the Dominion government. 1. The province and the locality within the province where the water-power is situated. 2. A summary of the report or reports made to the government on such water-power, if any report has been made, with date of the report and name of the party who has reported. 3. The power susceptible of being developed. 4. If under lease or alienated in any way, the name of lessee or purchaser, date, duration and condition of lease or purchase. 5. If under lease or alienated, whether public tenders were called for through the newspapers before lease or alienation took place. 6. If under lease or alienated, whether any report was sought and obtained by the government previous to such alienation, and by what officer such report was made to the government, and the purport of such report, as well as its date. 7. If under lease or alienation in any way, the amount due the government for rent or price of sale and arrears. 8. If under lease or alienated, whether the conditions of alienation have been fulfilled. Presented 21st January, 1907.—*Mr. Monk*.
Printed for both distribution and sessional papers.
- 116a.** Return to an address of the House of Commons, dated 28th November, 1906, for: 1. A copy of the contract or agreement by which the government has leased or alienated the water-powers on the Soulanges canal; of the tenders, if any were invited, before the disposal of said water-powers; and of any and all correspondence concerning the said powers before the disposal of the same by the government. 2. A copy of the order in council disposing of said water-powers. 3. A copy of all transfers of said water-powers since the original alienation of the same; of all correspondence relating to said transfers; and of orders in council authorizing or ratifying said transfers. 4. A copy of all reports and estimates in the possession of the government in regard to the extent and value of water-powers on the Soulanges canal. Presented 14th February, 1907.—*Mr. Monk*..... *Not printed.*
- 116b.** Return to an order of the House of Commons, dated 10th December, 1906, showing: (1) The water-powers, and location of same, along the Trent Canal waterways, still in possession of the government of Canada; (2) those along tributary waters under the same control; (3) the water-powers that have been leased, or otherwise disposed of; (4) the teams in each case; (5) the nature of the title in each instance. Presented 14th February, 1907.—*Mr. Hughes (Victoria)*..... *Not printed.*
- 116c.** Return to an order of the House of Commons, dated 27th February, 1907, for copies of all reports and other papers in connection with the choice of the eastern outlet for the Trent Valley Canal. Presented 27th February, 1907.—*Mr. Emmerson*..... *Not printed.*

CONTENTS OF VOLUME 13—*Continued.*

- 116d.** Report of E. J. Walsh, C.E., Engineer in charge of the surveys on the Trent Valley Canal, from Lake Simcoe to Georgian Bay, accompanied by plans, profiles and estimates. Presented 15th March, 1907, by Hon. H. R. Emmerson. *Not printed.*
- 117.** Return to an order of the House of Commons, dated 5th December, 1906, for a copy of all letters, telegrams or documents of any description, relating to, (a) the appointment of Mr. F. W. Aylmer to the position of resident engineer of the Dominion Public Works at Winnipeg; and (b) his resignation of said position, together with all letters, telegrams, &c., interchanged between Mr Aylmer and any official of the public works department, in this connection. Presented 21st January, 1907.—*Mr. Ames*. *Not printed.*
- 118.** Return to an address of the House of Commons, dated 28th November, 1906, for a copy of all correspondence, tenders, offers of lease or purchase or occupation, of water powers under the control of the government of Canada, and of any deed of alienation of the same, whether by lease or otherwise, situate within one hundred miles of the city of Montreal. Presented 21st January, 1907.—*Mr. Monk*. *Not printed.*
- 119.** Return to an order of the House of Commons, dated 9th January, 1907, for a copy of all papers and correspondence in connection with registered letters lost between Bethany and Millbrook, and other points in the county of Durham; more especially concerning a letter posted by one Joseph Hadden, of Bethany, to the Bank of Toronto, at Millbrook. Presented 24th January, 1907.—*Mr. Ward*. *Not printed.*
- 120.** Return to an order of the House of Commons, dated 3rd December, 1906, for a copy of all thermometer records of temperature on ocean-going vessels taken during the past season; stating names of vessel, and date of sailing, and port from whence sailing; also, stating if in cold storage chambers, cool air chambers, ventilated chambers, or unventilated chambers; also, in case of ventilated chambers, stating the method of ventilation. Presented 24th January, 1907.—*Mr. Smith (Wentworth)*. *Not printed.*
- 121.** Return to an address of the House of Commons, dated 17th December, 1906, for a copy of: 1. All reports made from time to time by the officers of the topographical surveys branch of the department of the interior, in reference to land in townships 10, 11, 12 and 13, ranges 7, 8, 9, 10, 11, 12 and 13, west of the 4th, and townships 7, 8 and 9, ranges 8, 9, 10 and 11, west of the 4th. 2. Orders in council dated the 13th December, 1886, and 21st December, 1897, setting apart certain lands, viz.: those portions of the south half of section 7, the northwest quarter of section 9, and section 21, lying south and east of the river, township 12, range 12; that part of section 35 lying south and east of the river, township 11, range 13, and those portions of sections 1 and 2, lying east of the river in township 12, range 13, all west of the 4th meridian, as reserved for watering of stock. 3. Report of inspection referred to in order in council of 21st December, 1903, showing that the land referred to in orders in council dated 13th December, 1886, and 21st December, 1897, were no longer required for the purpose for which they were reserved. 4. All other reports made from time to time to date by officers of the department of the interior regarding the character and fertility of the soil, climate, rainfall, water supply, or topographical features of the area, or any part of the area described in paragraph 1 of this resolution. Presented 28th January, 1907.—*Mr. Ames*. *Not printed.*
- 122.** Orders in Council authorizing the granting of permits to foreigners and foreign corporations to bring fresh fish in American bottoms to any port in British Columbia, to land such fresh fish at such port without payment of duties and tranship the same in bond to any part of the United States of America, &c. Presented 28th January, 1907, by Sir Wilfrid Laurier. *Not printed.*
- 123.** Return to an order of the House of Commons, dated 28th November, 1906, for a copy of all correspondence between the government, or any member or official thereof, and any member of the Royal Insurance Commission, or Mr. Shepley, K.C., or Mr. Tilley, barrister, or any other person employed by or on behalf of the government, relating in any way to the work of the commission, to the subjects and methods of conducting the inquiry, to suggestions as to what witnesses be called, what information be sought, and from whom; together with any reports received or transmitted in reference to the above; and also, for a copy of all instructions issued by the government, or any member thereof, to the commission, or any counsel employed thereat. Presented 29th January, 1907.—*Mr. Borden (Varleton)*. *Not printed.*
- 123a.** Report of the Royal Commission on Life Insurance. Presented 26th February, 1907, by Hon. W. S. Fielding. *Printed for both distribution and sessional papers.*

CONTENTS OF VOLUME 13—*Continued.*

- 123b.** Supplementary return to 123a. Memorandum of exhibits by companies. Presented 6th March, by Hon. W. S. Filding. *Printed for both distribution and sessional papers.*
- 123c.** Supplementary Report of the Royal Commission on Life Insurance. *See No. 123b.*
- 123d.** Return to an address of the Senate dated 14th March, 1907, for the papers referred to as Exhibits Nos. 682, 686, 688, 737, 738, 740, and 741, in Sessional Paper No. 123b, being a supplementary return laid on the table of this house during the present session of parliament. Presented 4th April.—*Hon. Mr. Ferguson.* *See No. 123b.*
- 124.** Return to an address of the Senate, dated 16th January, 1907, showing : The tenders called for the supply of sleepers for any part whatsoever of the Transcontinental Railway by the Commissioners of the Transcontinental Railway. Who are the tenderers. What are the prices asked by each of them. Who obtained the contract. At what price and for what quantity. Has the contractor begun the execution of his contract. What quantity has he delivered up to this date. To whom, and at what place. What amount of money has he received in payment. Presented 24th January, 1907.—*Hon. Mr. Landry.* *Not printed.*
- 125.** Return to an order of the House of Commons, dated 18th December, 1906, for a copy of all correspondence between the five companies and the one individual whose hydraulic mining leases were cancelled during the past year, and the government, or any department thereof. Presented 29th January, 1907.—*Mr. Roche (Marquette).* *Not printed.*
- 126.** Return to an order of the House of Commons, dated 16th January, 1907, for a copy of all papers and correspondence during the past year in connection with the leasing of any lands adjacent to Lake Manitoba for sporting or other purposes. Presented 29th January, 1907.—*Mr. Schaffner.* *Not printed.*
- 127.** Return to an address of the House of Commons, dated 28th November, 1906, for a copy of all correspondence between the government of Canada and the government of Australia, or any officials thereof, with reference to tariff preferences between the two countries; and all orders in council in reference thereto, for the years 1904, 1905, 1906. Presented 29th January, 1907.—*Mr. Borden (Carleton)* *Not printed.*
- 128.** Return to an order of the House of Commons, dated 3rd December, 1906, showing the number of acres of Indian lands sold in each year since 1896, with the price received per acre, and where selected in each case; a statement of the manner in which said lands were sold in each case per acre, whether by public tender or private sale. If sold by tender, in how many papers were advertisements printed, in each case; also, giving the number of days from first appearance of such notice until tenders were closed, in each case; the amount paid the Indians, the expenses connected with the sales, and where the balance of these sales was deposited; also, a copy of all leases given by this government of Indian lands in the provinces of Manitoba, Saskatchewan, Alberta and British Columbia, since 1896; with a statement showing how such lands were leased, either by public tender or by private arrangement. Presented 29th January, 1907.—*Mr. Armstrong.* *Not printed.*
- 129.** Return to an order of the House of Commons, dated 9th January, 1907, showing : 1. How many cheese curing buildings in all have been erected or provided by the government. 2. Where they are located. 3. The cost of each one, including care, and any other expense or expenses in connection therewith. 4. The charge, if any, made to the users of them. 5. What amount the government paid for transporting cheese from the factory to the curing rooms. The cost in connection with each factory, and the aggregate of all such costs up to date. 6. Who paid the charge for transportation from curing room when shipping; and if paid by the government, the aggregate of such costs to date. 7. The number of cheese manufacturers who have taken advantage of these curing rooms, and how many cheese have been stored by each, year by year, and the length of time each consignment has remained in the curing room. 8. The intention of the government to continue the use of these curing rooms for the future, or to extend them. 9. What disposition is to be made of those now owned by the government. Presented 1st February, 1907.—*Mr. Sproule.* *Not printed.*
- 130.** Return to an order of the House of Commons, dated 12th December, 1906, for a copy of all papers, and correspondence between the department of marine and fisheries and any person or persons, with reference to the sending of assistance and lifeboats to the relief of vessels recently wrecked on the north side of Prince Edward Island; and also papers and correspondence with reference to establishing life-saving stations and appliances at different points around the coast of Prince Edward Island. Presented 4th February, 1907.—*Mr. Lefurgey.* *Not printed.*

CONTENTS OF VOLUME 13—*Continued.*

- 131.** Return to an order of the House of Commons, dated 3rd December, 1906, for a copy of all correspondence and documents on file referring to the sale of any timber upon what is known as the "Light House" reserve, on Hope Island, in the Georgian Bay. Presented 4th February, 1907.—*Mr. Bennett.*.....*Not printed.*
- 132.** Copies of all correspondence between the Clerk of the Senate, and the Department of the Auditor General, and that of the Department of Justice, relating to the payment of sessional indemnity and travelling expenses to senators. Presented 1st February, 1907, by the Hon. The Speaker.*Not printed.*
- 133.** Pay and Allowances Regulations for the Canadian militia, to have effect from the 1st January, 1907. Presented 6th February, 1907, by Sir Frederick Borden.*Not printed.*
- 134.** Return to an order of the House of Commons, dated 30th January, 1907, for a copy of all accounts, vouchers, correspondence, documents and papers relating to the purchase of supplies forwarded or intended to be forwarded to Kingston, Jamaica, for the relief or assistance of sufferers from the recent disaster in that city. Presented 6th February, 1907.—*Mr. Taylor.**Not printed.*
- 135.** Return to an address of the Senate, dated 23rd February, 1907, asking for the production before the house of all papers, orders, rules, charges, reports of inquiries, evidence, and judgment rendered, by any council of war or court-martial whatsoever, concerning a soldier of the ordnance corps by the name of Télesphore Roy, at Quebec, accused and found guilty of any offence whatsoever, and sentenced on that account to cells and hard labour; together with all documents relating to this matter, before and after the charge and the judgment of the military court; the names of the complainant, of the officers who sat on the court-martial, of the defender of the accused, of those who confirmed the judgment; and a copy of the record upon which were based both the judgment of the court martial and the confirmation by superior authority of the judgment rendered. Presented 6th February, 1907.—*Hon. Mr. Landry.*.....*Not printed.*
- 136.** Return to an address of the House of Commons, dated 10th December, 1906, for a copy of all orders in council, contracts, reports of experts or officials, and of all correspondence relating to the adoption and purchase of 250 subtarget guns, by the department of militia, and especially all letters passing between the Ontario Sub-Target Company (Limited), Mr. J. H. Jewell, Mr. Hartley Dewart, K.C., or any director or shareholder of the Sub-Target Company, and the Minister of Militia, or his private secretary, in reference to purchases or contracts, or agreements to purchase, either proposed or consummated, and payments made thereon or in pursuance thereof. Presented 7th February, 1907.—*Mr. Foster.*.....*Not printed.*
- 136a.** Supplementary return to No. 136. Presented 20th March, 1907.....*Not printed.*
- 137.** Return to an address of the House of Commons, dated 30th January, 1907, for a copy of documents relating to the Metlakatla Indian Reserve, that is to say, a certain agreement with the province of Prince Edward Island in or about the year 1876, and mentioned in an order in council bearing date 2nd April, 1906, the said order in council and all recent correspondence dealing with the reserve. Presented 7th February, 1907.—*Mr. Borden (Carleton).*.....*Not printed.*
- 138.** Return to an address of the House of Commons, dated 28th November, 1906, for a copy of all orders in council, agreements, valuations, reports, memoranda, letters, telegrams, correspondence, documents and papers, in connection with the sale or grant by the government of Canada, or any department thereof, since 1st January, 1905, of any public lands or public domain, other than to actual settlers. Presented 7th February, 1907.—*Mr. Borden (Carleton).*.....*Not printed.*
- 139.** Return of the names of all persons appointed to or promoted in the Civil Service of Canada, during the calendar year 1906. Presented 14th February, 1907, by Sir Wilfrid Laurier.....*Not printed.*
- 140.** Return to an address of the House of Commons, dated 28th January, 1907, for a copy of all orders in council, rules or regulations governing the operation and management of the Government Printing Bureau. Presented 14th February, 1907.—*Mr. Verville.*.....*Not printed.*
- 141.** Return to an order of the House of Commons, dated 3rd December, 1906, for a copy of all correspondence concerning the retirement from office of Mr. Talbot, late postmaster at Cannington, Ontario. Presented 14th February, 1907.—*Mr. Hughes (Victoria).*.....*Not printed.*
- 142.** Return to an order of the House of Commons, dated 30th January, 1907, showing what life-saving stations are maintained on the sea coasts and inland waters of Canada, when the same were erected, respectively, and at what cost, respectively, and the cost of maintenance of each of same, during the last ten years. Presented 14th February, 1907.—*Mr. Boyce.*.....*Not printed.*

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- 143.** Return to an address of the House of Commons, dated 30th January, 1907, for a copy of all papers, memorials, memorandums, documents and correspondence between the provincial assembly and provincial government of Manitoba, and the Dominion Parliament and Dominion Government during the past ten years, in reference to the extension of the boundaries of Manitoba. Presented 18th February, 1907.—*Mr. Roche (Marquette)*..... *Not printed.*
- 144.** Despatches and orders in council relative to Colonial Conference, 1907, from 20th April, 1905, to 15th February, 1907. Presented 18th February, 1907, by Sir Wilfrid Laurier.
Printed for both distribution and sessional papers.
- 145.** Return to an address of the House of Commons, dated 28th January, 1907, for a copy of all orders in council, letters, papers, correspondence and documents relating to or connected with the resignation of Mr. Alexander Henderson as judge of the county court of British Columbia. Presented 18th February, 1907.—*Mr. Borden (Carleton)*..... *Not printed.*
- 146.** Return to an order of the House of Commons, dated 6th February, 1907, showing the number of persons employed in the House of Commons, (a) as permanent employees, and in what capacity; (b) as sessional employees, and in what capacity; (c) the salary of each such employee; (d) the name of each employee of the house, or connected with the service of the house, as translators or otherwise, not living at Ottawa; (e) where each employee lives, and what his salary or remuneration is. Presented 18th February, 1907.—*Mr. Bergeron*..... *Not printed.*
- 146a.** Return to an order of the House of Commons, dated 6th February, 1907, showing where all the clerical work of the House of Commons is done, (a) the ordinary routine work; (b) all the translation; (c) how much is paid to translators not living in Ottawa, or working at their homes in Ottawa, per day, or how paid; (d) how much was paid last year for all such services in the House of Commons. Presented 18th February, 1907.—*Mr. Bergeron*..... *Not printed.*
- 147.** Copy of order in council respecting the landing of fresh fish in American bottoms and the purchase of supplies by such vessels, in ports of British Columbia,—and also copy of instructions to the collector of customs, Vancouver, B.C., respecting the same. Presented 19th February, 1907, by Hon. W. Paterson..... *Not printed.*
- 148.** Return to an address of the House of Commons, dated 6th February, 1907, for a copy of all orders in council, reports, letters, telegrams, accounts, vouchers, documents and other papers since the 1st January, 1902, relating to the surrender of the whole or any portion of the Nipissing Indian Reserve. Presented 20th February, 1907.—*Mr. Taylor*..... *Not printed.*
- 149.** Return to an address of the Senate, dated 29th of January, 1907, for copies of all reports received by the government or any member thereof, relating to the establishment of an experimental branch farm in Prince Edward Island, and any order in council made regarding the same; also a statement showing what tract of land, if any, has been purchased for the purposes of the said farm, where it is located, the number of acres acquired, the price paid for the same, and the name of the vendor. Presented 19th February, 1907.—*Hon. Mr. Ferguson*..... *Not printed.*
- 150.** Return (in so far as the department of the interior is concerned) to an address of the House of Commons, dated 6th February, 1907, for a copy of all orders in council in connection with the land grants or subsidies to the following railways: The Manitoba and Southeastern Railway Company, the Lake Manitoba Railway and Canal Company, the Hudson Bay Railway Company, the Winnipeg and Great Northern Railway Company, and all other railways now part of The Canadian Northern Railway Company's system, west of the province of Ontario. Presented 21st February, 1907.—*Mr. McCarthy (Calgary)*..... *Not printed.*
- 151.** Correspondence respecting the vacancy on the Bench of the Supreme Court of Nova Scotia. Presented 21st February, 1907, by Hon. A. B. Aylesworth..... *Not printed.*
- 152.** A statement of the affairs of the British Canadian Loan and Investment Company, as on 31st December, 1906. Presented 22nd February, 1907, by the Hon. The Speaker..... *Not printed.*
- 153.** Return to an order of the House of Commons, dated 6th February, 1907, showing: In respect of items "Locomotive and car shops, and land purchase at Moncton, \$540,000" and "New machinery for locomotive and car shops, \$72,500", in the Appropriation Act of 1906, Schedule B, page 29, all expenditures made thereunder up to December 31st, 1906, said statement to specify in respect of each payment, the date of the transaction, the nature of the goods supplied or service rendered, name of the person or company to whom the consideration was paid. Presented 25th February, 1907.—*Mr. Crocket*..... *Not printed.*

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- 154.** Return to an order of the House of Commons, dated 21st January, 1907, for a copy of all reports, papers, surveys, estimates, correspondence and other documents, with reference to the proposed branch line from the Prince Edward Island Railway at or near O'Leary, to a point at or near West Cape. Presented 25th February, 1907.—*Mr. Lefurgey*. *Not printed.*
- 155.** Return to an order of the House of Commons, dated 3rd December, 1906, for a copy of all correspondence, contracts, appointments of overseers, in respect to Port Bruce Harbour, in the county of Elgin, Ontario, since 1st January, 1905; also a return showing voucher pay-sheets, amount of new material used, from whom purchased, of all day or contract work on said harbour, giving the names of overseers and when appointed, from same date. Pre-ented 26th February, 1907.—*Mr. Marshall*. *Not printed.*
- 156.** Return to an order of the House of Commons, dated 6th February, 1907, showing : 1. What government dredges operated in the maritime provinces during the years 1900-1, 1901-2, 1902-3, 1903-4, 1904-5, 1905-6. 2. At what ports or places in the maritime provinces dredging was carried on during said years, giving the name of the dredge operating in each place, the number of days each dredge was employed, and the number of cubic yards excavated at each place where dredging was carried on. 3. Where said dredges are at present. Presented 26th February, 1907.—*Mr. Sinclair*. *Not printed.*
- 157.** Return to an address of the House of Commons, dated 28th November, 1906, for a copy of all orders in council, valuations, letters, telegrams, correspondence, memoranda, conveyances and other documents and papers, from the first day of January, 1900, to the present time, relating to the proposals to acquire lands at Truro, Nova Scotia, for the Intercolonial Railway, and especially all such documents as aforesaid relating to the acquisition of land purchased by the Crown from H. W. Yuill by deed bearing date on or about the 17th October, 1904; also a copy of conveyances bearing date in October, 1904, under which the said Yuill acquired the said property; also all reports touching the question of sites for the construction of a round-house at Truro. Presented 28th February, 1907.—*Mr. Borden (Carlton)*. *Not printed.*
- 158.** Return to an order of the House of Commons, dated 11th February, 1907, showing : 1. What work the Railway Department ordered and performed at public expense to rail and ballast the whole or part of a branch railway from the Intercolonial Railway to the Wallace Quarries, Cumberland County, Nova Scotia, and what length was railed or ballasted. 2. From what point and for what distance the department conveyed ballast for the said work. 3. The length of said branch line. 4. Why the said branch line was not extended to Wallace Village, and what distance farther than constructed it would be necessary to build to give Wallace Village rail connection. 5. If the department hauls cars to said Wallace Quarries at public expense, and why it is done. 6. If shunting charge on the said branch line was cancelled, when it was cancelled, and for what reason. 7. At whose instance or request, or for whose benefit the above-mentioned work was done, and the shunting charge cancelled. 8. How much the department has expended for work on construction of said branch line. 9. Who the owners or operators of the said Wallace Quarries are. 10. What the freight rates collected by the department over the said branch lines are. 11. What similar or any concessions in the matter of construction, reduction of freight rates, or cancellation of shunting charges, to or in relation to any other quarries operated at or near Wallace have been granted by the department. 12. What other quarries operating at or near Wallace, and doing business over the Intercolonial Railway, are charged freight rates or shunting charges, or both, upon or in respect to any branch line used by them. 13. What companies are so operating, and what charges the department makes against them. 14. What owners or operators of the Wallace Quarries above-mentioned are related to the minister of railways, who they are, and how related. Presented 28th February, 1907.—*Mr. McLean (Queen's)*. *Not printed.*
- 159.** Return to an order of the House of Commons, dated 18th February, 1907, showing: Summary of stock, implements, chattels, grain, hay, roots, and all other kinds of fodder, and their value, on the first day of December, for the years 1905-1906 on the Central Experimental Farm, Ottawa. Presented 28th February, 1907.—*Mr. Jackson (Elgin)*. *Not printed.*
- 160.** Return to an order of the House of Commons, dated 10th December, 1906, for a copy of the correspondence, telegrams, tenders, and engineer's estimate, in reference to letting the contract for the construction of extension pier at Port Daniel, in county of Bonaventure, on 30th May, 1904. Presented 1st March, 1907.—*Mr. Martin (Queen's)*. *Not printed.*

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- 161.** Return to an order of the House of Commons, dated 3rd December, 1906, for a copy of all correspondence, contracts, appointments of overseers, in respect to Port Burwell Harbour, in the county of Elgin, Ontario, since 1st January, 1905; also a return showing pay-sheets, amount of new material used, from whom purchased, of all day or contract work on said harbour, giving names of overseers, and when appointed from the same date. Presented 1st March, 1907.—*Mr. Marshall.*
Not printed.
- 162.** Copy of Deed, Joseph H. Henderson *et al.* to His Majesty the King, for 34.78 acres of land in the city of Halifax, N.S., for the Intercolonial Railway. Presented 1st March, 1907, by Hon. H. R. Emmerson.....*Not printed.*
- 163.** Return to an order of the House of Commons, dated 3rd December, 1906, showing: 1. The present indebtedness to the Dominion Government of the Montreal Turnpike Trust, (a) on capital account; (b) for arrears of interest. 2. The amount collected at each toll-gate belonging to the said Turnpike Trust during the year ending 31st December, 1905. 3. The names of all parties who have commuted their tolls, and the amount of commutation paid in each case. 4. The amounts expended on each section or road division under the control of said trust, during the said year, ending 31st December, 1905, and the contracts given out during the year, with the name of the contractor, and the date and amount involved in each case. 5. The amount paid out during the said year at each toll-gate and check-gate for salaries of day and night keepers, and other expenditures at each of the toll-gates maintained. 6. The names of all parties holding passes for free use of the road, under the control of said trust, during the said year. 7. The expense of the said trust during the said year, for rent, salaries of the office, giving name and remuneration of each official. 8. The actual indebtedness in detail of the said trust, outside of its bonds, due to the government of Canada. 9. The amount collected during the year 1905 from municipalities, under special agreements made, as their share, pro rata, of the bonded indebtedness of the Turnpike Trust. Presented 1st March, 1907.—*Mr. Monk.*.....*Not printed.*
- 164.** Return to an order of the House of Commons, dated 16th January, 1907, showing: 1. What amounts were paid into the office of the receiver general during the fiscal year 1905-1906 on account of contractors' deposits for security, and by what contractors these sums were paid. 2. The deposits forfeited to the government during the said fiscal year, names of the contractors and the amounts so forfeited. 3. Cheques received as security from contractors during the said fiscal year, held by the departments which received them, and from whom they were received. 4. The total amount now in the hands of the receiver general and of the several departments, respectively, belonging to this account. Presented 1st March, 1907.—*Mr. Foster.*.....*Not printed.*
- 165.** Return to an address of the House of Commons, dated 10th December 1906, (in so far as the department of customs is concerned), for a copy of all orders in council, correspondence, and all other papers, relating to the Standard Chemical Company (Limited), or Peuchen & Co., in its dealings with the Customs and Inland Revenue Departments, from the date of the incorporation of the said company to the present date. Presented 1st March, 1907.—*Mr. Robitaille.*.....*Not printed.*
- 166.** Return (in so far as the department of the interior is concerned) to an address of the Senate dated 7th February, 1907, calling for the orders in council of the 11th of May, 1885, and the 5th of March, 1895, allotting lands in the Northwest Territories under the authority of the Act of 1884, chapter 25, section 7, and all orders in council passed since 1895, relating to grants of lands for this purpose. Also copies of all contracts between the Canadian Northern Railway Company and the government relating to the construction of a line of railway to the Hudson Bay or any portion of the said line of railway. Presented 21st February, 1907.—*Hon. Mr. Ferguson.*.....*Not printed.*
- 167.** Return to an order of the House of Commons, dated 9th January 1907, showing all timber lands in the railway belt in the province of British Columbia, sold or leased by the government, or any department thereof, since the 1st July, 1896, the description and area of such lots, the applications made therefor, the notice of advertisement for sale or tender, the tenders received, the amount of each tender, the tenders accepted, the name and address of the person or company to whom each lot was sold or leased. Presented 4th March, 1907.—*Mr. McCarthy (Calgary).*.....*Not printed.*
- 167a.** Return to an order of the House of Commons, dated 11th March, 1907, showing: The timber lands sold or leased by the department of the interior subsequent to the date of those included in Sessional Paper No. 90, brought down to the house on the 9th of April, 1906; the description and area of such lands, the applications made therefor, the notice of advertisement for sale or tender, the tenders received, the amount of each tender, the tenders accepted, the name of the person or com-

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- pany to whom each lot was sold or leased, and the name and address of each person or company to whom any of such leases have been transferred. Presented 9th April, 1907.—*Mr. Ames. Not printed.*
- 167b. Return to an order of the House of Commons, dated 8th April, 1907, showing, in respect of timber berths Nos. 824, 1062, 1107, 1108, 1171 and 1212, all bonuses, rentals or dues paid to date by the lessees or other assigns to the government, together with a copy of all applications, correspondence, reports, advertisements, tenders, leases, transfers, or memoranda of any description, and a copy of the regulations of the department of the interior in force at the time said timber berths were leased, and the corresponding regulations in force at the present time. Presented 26th April, 1907.—*Mr. Boyce. Not printed.*
168. Return to an order of the House of Commons, dated 4th March, 1907, showing : 1. How much money has been paid by the government of Canada in the form of bounties on lead. 2. To what companies the same has been paid. 3. Where the mines are located. Presented 4th March, 1907.—*Mr. Marshall. Not printed.*
169. Return to an address of the House of Commons, dated 11th February, 1907, for a copy of all correspondence, reports and letters, between this government and the government of the United States, relating to rural free delivery. Presented 5th March, 1907.—*Mr. Armstrong. Not printed.*
170. Return to an order of the House of Commons, dated 11th February, 1907, showing the names of the employees of the Brandon Post Office during the year ending June 30th, 1906, and salaries received by them, respectively ; also names and salaries of those now employed in the office ; also amount paid by the postmaster for help and expenses for year ending June 30th, 1906. Presented 5th March, 1907.—*Mr. Roche (Marquette). Not printed.*
71. Return to an order of the House of Commons, dated 3rd December, 1906, for a copy of all correspondence, contracts, appointments of overseers, in respect to Port Stanley Harbour, in the county of Elgin, Ontario, since 1st January, 1905 ; also a return showing pay-sheets, amount of new material used, from whom purchased, of all day or contract work on said harbour, giving names of overseers, and when appointed from the same date. Presented 5th March, 1907.—*Mr. Marshall. Not printed.*
172. Return to an order of the House of Commons, dated 23th January, 1907, showing : In respect of the special inspection undertaken in April last of all unpatented homesteads entered for prior to 1st September, 1905, in the Alameda, Battleford, Regina and Yorkton land districts (referred to in Part I, page 4, of the Report of the Department of the Interior, 1905-6 : (a) the report of the Inspector of Dominion Land Agencies ; (b) the instructions issued to the several land agents and homestead inspectors ; (c) all correspondence between the department of the interior and the aforesaid agencies in respect to the necessity or desirability of such inspection, the manner in which it should be conducted, and the action to be taken in consequence of the facts brought out by such inspection. Presented 6th March, 1907.—*Mr. Ames. Not printed.*
173. Return to an address of the Senate, dated 13th June, 1906, for a copy of the correspondence exchanged between the Honourable Mr. Landry and the Right Honourable Sir Wilfrid Laurier, and between the latter and the Department of Militia and Defence, on the subject of the refusal by that department to translate and to cause to be published in French the regulations for the militia which were published, in English only, in the *Canada Gazette*, of the 5th May last. Presented 5th March, 1907.—*Hon. Mr. Landry. Not printed.*
174. Return to an order of the House of Commons, dated 18th February, 1907, for a copy of all regulations submitted by the government to trans-Atlantic steamship companies for their guidance in regard to stowing of perishable products, or temperatures to be maintained in cold storage, or cold air chambers, or ventilation required in ordinary storage chambers on their steamships. Presented 7th March, 1907.—*Mr. Smith (Wentworth). Not printed.*
175. Return to an order of the House of Commons, dated 23rd January, 1907, for a copy of all correspondence and written communications between judges of the Provincial Courts and the Minister of Justice, or any member or official of the government, since the passing of the Dominion Act 4-5 Edward VII, chapter 31, in reference to section 7 of said Act, or in reference to judges acting as executors, administrators or trustees of estates, directors or managers of companies, corporations or firms, or arbitrators, umpires or referees in matters of controversy, or engaging in other extrajudicial work ; and including a copy of a circular letter to judges issued by the Minister of Justice, and referred to by the Minister in *Hansard* for First Session of 1906, at page 869, and of the answers of the judges to the circular. Presented 8th March, 1907.—*Mr. Lennox. Not printed.*

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176. Return to an order of the House of Commons, dated 28th January, 1907, for a copy of the report of Mr. C. W. Speers, General Colonization Agent, in respect of the special inspection and enumeration which was made of the Doukhobor colonies during the year 1905-6, together with the instructions which led up to it, and the report of the inspectors engaged in the work (without census sheets), and any correspondence in connection with or arising out of the same. Presented 8th March, 1907.—*Mr. Ames*..... *Not printed.*
177. Return to an order of the House of Commons, dated 28th February, 1907, for a copy of all correspondence in regard to the mission of W. L. Mackenzie King, Deputy Minister of Labour, to England, to secure legislation by the British Parliament to prevent fraudulent representations being made in that country to induce emigration to Canada; also a copy of the legislation enacted as a result of such mission. Presented 8th March, 1907.—*Mr. Smith (Nanaimo)*..... *Not printed.*
178. Return to an order of the House of Commons, dated 18th February, 1907, for a copy of the report respecting the selection and location of 3,500,000 acres in the Peace River District of British Columbia, which has been prepared upon the exploratory survey mentioned by the Minister of the Interior on the 7th February in the House of Commons. Presented 11th March, 1907.—*Mr. Borden (Carleton)*..... *Printed for sessional papers.*
179. Return to an order of the House of Commons, dated 20th February, 1907, showing all timber licenses over Indian lands in the territorial district of Algoma granted or rented by the government since 1896; returns of such licenses or rentals, the area covered by each of the same, the names and address of the several licensees, and the prices or rentals paid, respectively, and any conditions which may be attached to the same, respectively. Presented 12th March, 1907.—*Mr. Boyce*..... *Not printed.*
180. Return to an order of the House of Commons, dated 25th February, 1907, for a copy of all correspondence, documents and papers, accounts, agreements, grants and memoranda respecting the application for and sale of timber lands in the townships of Fisher, Haviland and Tilley, in the district of Algoma, on the 21st of November, 1900, by the Superintendent General of Indian Affairs, to Messrs. Wilson, Reeser and Philp. Presented 12th March, 1907.—*Mr. Boyce*..... *Not printed.*
181. Return to an order of the House of Commons, dated 10th December, 1906, for a copy of all reports made by superintendents of experimental farms in Canada regarding the results of experiments made during the past season to test the value of fish scrap produced at the government reduction works at Canso, Nova Scotia, as a fertilizer. Presented 12th March, 1907.—*Mr. Sinclair*. *Not printed.*
182. Return to an order of the House of Commons, dated 25th February, 1907, showing what statistical matter has been omitted from the Canada Year-book, 1905, which it has been customary to include in the Year-book of former years; and also where such omitted information can be found if published elsewhere. Presented 12th March, 1907.—*Mr. Kemp*..... *Not printed.*
183. Return to an order of the House of Commons, dated 11th February, 1907, showing: 1. What control the government has over the teachers in the Indian schools of Canada. 2. Whether or not the teachers are compelled by law to have certificates before accepting a position in the Indian schools of Canada. 3. How many teachers in the Indian schools of Canada have first class certificates, how many second class certificates, how many third class certificates, and how many are teaching on permits. 4. What standard of school books are used in said schools, and if said books are issued under instructions, from the department of Indian affairs, or issued by the department, or by what authority said books are issued, and who has charge of the issuing of such books. 5. Any regulations relating to education of Indians passed by this government since 1896, and the nature of said regulations. 6. The regulations, if any, that have been passed since 1896 relating to teachers in Indian schools. Presented 13th March, 1907.—*Mr. Armstrong*..... *Not printed.*
184. Return to an order of the House of Commons, dated 25th February, 1907, for a copy of all correspondence had between the Attorney General of New Brunswick, or any other member of the New Brunswick government, and the Minister of Justice, or any other member of the Dominion government, touching or in any way relating to the reorganization of the Supreme Court of New Brunswick. Presented 13th March, 1907.—*Mr. Crocket*..... *Not printed.*
185. Return to an order of the House of Commons, dated 20th February, 1907, showing: 1. The names of every officer, non-commissioned officer and man, of the Second Rifles Royal Canadian Regiment, the Canadian Mounted Rifles, the Royal Canadian Field Artillery, and the Strathcona Horse, and the South African Constabulary, who enlisted from the province of British Columbia, in order to take part in active military operations in South Africa. 2. The names of all British Columbians

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- who served with or embarked for service with the British forces in South Africa who were not members of the above corps. 3. The names of all British Columbians who were regularly appointed to the medical staff, and were actively engaged in said military operations. 4. The names of nurses, hospital dressers, and orderlies, resident in British Columbia, who were actively engaged in said military operations. Presented 13th March, 1907.—*Mr. Ross (Yale-Cariboo)*.....*Not printed.*
- 186.** Return to an order of the House of Commons, dated 23rd January, 1907, for a copy of all correspondence, with the papers and reports made by superior officers of the Department of Marine and Fisheries, or by Captain Wakeham, or any other person, regarding the dismissal from the service of R. P. Dubé, second mate on board *La Canadienne*; also for a copy of the report made by the said R. P. Dubé to the Department of Marine and Fisheries regarding the fire on the *Aberdeen*, on the 10th November, 1905. Presented 13th March, 1907.—*Mr. Gaurou*.....*Not printed.*
- 187.** Return to an order of the House of Commons, dated 11th February, 1907, for a copy of the record and all proceedings in the suit in the Exchequer Court of Canada between the King, on the information of the Attorney General of the Dominion of Canada, and H. E. Lyon, plaintiffs, and Malcolm McKenzie and Felix A. Montalbetti, defendants, including all correspondence in connection therewith between the Department of Justice and the Department of the Interior, or any officers thereof, respectively, and between either of the said departments, or any officers thereof, and any other person or persons whatsoever; and including all documents or memorandum in any way relating to the said suit, including instructions to counsel engaged therein on behalf of the plaintiffs; and also all documents on file in the Department of the Interior, relating to the northeast quarter of section 35, in township 7, range 4, west of the 5th meridian. Presented 18th March, 1907.—*Mr. Herron*.....*Not printed.*
- 187a.** Supplementary return to No. 187. Presented 10th April, 1907.....*Not printed.*
- 188.** Return to an order of the House of Commons, dated 23rd January, 1907, showing: All sales of Dominion lands of 160 acres and upwards, in Manitoba, Saskatchewan and Alberta, which have been made by the government, exclusive of school lands, since the 1st January, 1905, with the price obtained, and dates of sale. Presented 19th March, 1907.—*Mr. Lake*.....*Not printed.*
- 189.** Return to an address of the Senate, dated 6th March, 1907, for copies of all correspondence between the government of Canada or any member thereof with any person whatsoever, and any report from any officer of the government regarding the question of pensions by the state to deserving persons of advanced age; and also a copy of a Bill referred to by the Right Honourable the Minister of Trade and Commerce during a speech made by him in the Senate on the 28th February last, dealing with the sale of annuities by the government of Canada. Presented 19th March, 1907.—*Hon. Mr. Ferguson*.....*Not printed.*
- 190.** A statement in pursuance of section 17 of the Civil Service Insurance Act for the year ending 30th June, 1906. Presented (Senate) 15th March, 1907, by Hon. R. W. Scott.....*Not printed.*
- 191.** Return to an address of the House of Commons, dated 28th March, 1906, for copies of all orders in council, reports, memoranda, correspondence, valuation, documents and papers, of every kind and nature and description, relating to the property situated on the south side of Spring Garden Road, in the city of Halifax, upon which the old drill shed was or is situated; or relating to the leasing, conveying, disposal, or user of the said property, or of any property conveyed to the crown in consideration or in part consideration therefor. Presented 22nd March, 1907.—*Mr. Fowler*.....*Not printed.*
- 192.** Return to an order of the House of Commons, dated 11th February, 1907, for a copy of all reports or correspondence between the Railway Commission and the Department of Justice, concerning the trial of one Atkinson, on a charge of manslaughter, in connection with the collision which took place on the Grand Trunk Railway at Richmond, Quebec, in August, 1904. Presented 22nd March, 1907.—*Mr. Worthington*.....*Not printed.*
- 193.** Return to an order of the House of Commons, dated 6th February, 1907, for a copy of all correspondence, telegrams, orders in council, and all other papers and documents in possession of the government, or any member or official thereof, in any way relating to the purchase by the government of what is known as the Warburton property in Charlottetown, for a rifle range, and a right of way for approach to the Hillsboro' bridge. Presented 25th March, 1907.—*Mr. Lefurgy*.....*Not printed.*
- 193a.** Supplementary return to No. 193. Presented 15th April, 1907.....*Not printed.*

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194. Return to an address of the House of Commons, dated 17th December, 1906, for a copy of all orders in council, advertisements for tenders, tenders, specifications of every kind, plans, drawings, reports, letters, telegrams, correspondence, contracts, agreements and other documents and papers of every kind, touching or relating to the construction of immigration buildings in the city of Winnipeg, since 1st January, 1900. Presented 25th March, 1907.—*Mr. Borden (Carleton)*.
Not printed.
- 194a. Supplementary return to 194. Presented 19th April, 1907.....*Not printed.*
195. Return to an order of the House of Commons, dated 4th March, 1907, showing : The number of desks of every kind and description, with prices of the same, bought for the House of Commons by the government, since 1896. (Particulars of purchases by Stationery Branch and the Sergeant-at-Arms.) Presented 25th March, 1907.—*Mr. Bergeron*.....*Not printed*
196. Return to an order of the House of Commons, dated 4th March, 1907, showing: 1. The chief differences in principle between the Ross rifle and the Snider-Enfield, the Martini-Henry and the Lee-Enfield. 2. The average annual number of each, the Ross rifle and the Lee-Enfield rifle, manufactured. 3. The various kinds of rifle "sights" for which adoption has been sought in recent years. 4. The number of accidents to men in Canada from each, the Lee-Enfield and the Ross rifle. 5. The break-ages or disabled rifles of each class recorded. Presented 25th March, 1907.—*Mr. Hughes (Victoria)*.
Not printed.
197. Return to an address of the House of Commons, dated 17th December, 1906, for a copy of all orders in council, advertisements for tenders, tenders, specifications, plans and drawings, reports, letters, telegrams, correspondence, contracts and other documents and papers of every kind, touching or relating to the construction of a post office building at Vancouver, British Columbia. Presented 27th March, 1907.—*Mr. Borden (Carleton)*.....*Not printed.*
198. Return to an order of the House of Commons, dated 11th February, 1907, for a copy of all letters, reports and other papers connected with the cutting of a channel into a lake at Red Head, Shelburne Co., N.S., for the purpose of connecting it with the sea. Presented 2nd April, 1907.—*Mr. Gunn*.
Not printed.
199. Return to an order of the House of Commons, dated 14th January, 1907, showing : The number of miles of government telegraph lines, respectively, in each of the provinces and districts of Canada, the points between which they run, and the various stations on each line, and population of the same, the working expenses and receipts, respectively of each station and line for the ten years ending December 31st, 1906; the amount that has been spent yearly during the ten past years, (a) on construction of new lines or extensions; (b) on repairs and maintenance of existing lines; and the total expenditure for, (a) construction; (b) repairs and maintenance of the present government telegraph lines, and the receipts and working expenses thereof by years. Presented 27th April, 1907.—*Mr. Foster*.....*Not printed.*
200. Return to an address of the House of Commons, dated 28th March, 1906, showing : 1. What proprietary rights, or rights of licensing, or control or other rights, if any, are vested in the government of Canada or the crown, in the right of Canada in respect to (a) sea fisheries; (b) inland fisheries in each province. 2. What such rights are vested in each provincial government or the crown in the right of each provincial government, in respect of the matter aforesaid. 3. What rights, powers or jurisdiction to lease or otherwise regulate or control, manage or interfere with sea or inland fisheries, are exercised by the federal government or any department thereof. 4. What such rights, powers or jurisdiction, if any, are exercised by any provincial government or department thereof. 5. What jurisdiction to legislate is possessed or exercised by, (a) the parliament of Canada; (b) any provincial legislature with respect to: (c) sea fisheries, or (d) inland fisheries in regard to: (e) proprietary rights; (f) licensing; (g) other regulations; (h) control or management. 6. Whether any differences or disputes between any provincial government and the federal government now exist with respect to any of the matters above mentioned; and, if so, a statement of the exact nature and form of such disputes or differences. Presented 10th April, 1907.—*Mr. Borden (Carleton)*....*Not printed.*
201. Copy of amendment to the Postal Convention of January, 1888, between Canada and the United States. Presented 11th April, 1907, by Hon. R. Lemieux.....*Not printed.*
202. Return to an order of the House of Commons, dated 18th February, 1907, for a copy of all correspondence, telegrams, reports, and all other information in the possession of the government, or any member or official thereof, in reference to winter communication, and the construction of a tunnel between Prince Edward Island and the mainland of Canada. Presented 12th April, 1907.—*Mr. Martin (Queen's)*.....*Not printed.*

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- 202a.** Supplementary return to 202. Presented 17th April, 1907. *Not printed.*
- 203.** Return to an order of the House of Commons, dated 30th January, 1907, showing what wrecks have been reported to the Department of Marine and Fisheries of Canada, which have occurred on the Great Lakes, that is, Lakes Huron and Superior, since the first day of May, 1882; showing what loss of life occurred as a consequence of each wreck, the reported or ascertained cause of the wreck, showing in each case whether there was an investigation into the cause of the wreck, the tonnage and approximate value of each vessel and cargo lost. Presented 12th April, 1907.—*Mr. Boyce.*
Not printed.
- 204.** Return to an order of the House of Commons, dated 3rd December, 1906, for a copy of all correspondence between the postmaster general's department and any person or persons, relating to the forbidding the use of the mails to the newspaper known as *Lowrey's Claim*, and copies of the articles complained of. Presented 15th April, 1907.—*Mr. Galliher.* *Not printed.*
- 205.** Return to an order of the House of Commons, dated 29th November, 1906, showing the names, places of residence, places or ports where shipped, and dates when shipped, of the officers and crews of the steamers *Minto*, *Stanley* and *Princess*; and also of the dredges *W. S. Fielding*, *St. Lawrence* and *George MacKenzie*. Presented 12th April, 1907.—*Mr. McLean (Queen's).* *Not printed.*
- 205a.** Return to an address of the Senate dated 27th February, 1907, asking for a statement showing: 1. How many men are now or have been employed on the government steamer *Montcalm*, giving the name of each, the date of his employment, the nature of his duties, the amount of his remuneration, and stating in each case whether the employment has been permanent or temporary. 2. What service or services has the said steamer been engaged in, since her construction. If there have been different services the statement to show definitely the time devoted to each service. 3. At what places in the St. Lawrence or elsewhere has the said steamer operated in ice-breaking, and to what extent has such operation resulted in opening passages for ordinary shipping. 4. What has been the total cost of maintenance of said steamer, including wages, fuel, repairs, board of crew, and other expenses, from the time she commenced service (the date to be stated) up to the 25th instant. 5. And showing the tonnage, horse-power, and original cost of said steamer. Presented 17th April, 1907.—*Hon. Mr. Ferguson.* *Not printed.*
- 206.** Return to an order of the House of Commons, dated 17th December, 1906, for a copy of all correspondence between the Winnipeg Board of Trade and any other body or individual and the government or any department thereof, relating to the restriction of fishing on Lake Winnipeg. Presented 12th April, 1907.—*Mr. Roche (Marquette).* *Not printed.*
- 207.** Return to an order of the House of Commons, dated 17th December, 1906, for: 1. A copy of all leases and agreements between the government, represented by the Department of Marine and Fisheries, and (a) the Athabasca Fish Company (J. K. McKenzie, Selkirk, Manitoba), or their assigns, Messrs. Butterfield & Dee; (b) A. McNee, Windsor, Ontario; (c) the British American Fish Corporation of Montreal and Selkirk (F. H. Markey). 2. A copy of all reports, correspondence or documents, relating to or touching upon the application for securing of, transfer of, or enjoyment of any privileges under said leases. 3. A statement of all rentals, bonuses, or payments to the government in respect of such leases to date. 4. All information in the possession of or procurable by the government with reference to (a) the number of tugs, boats and men employed; (b) the quantity and value of nets used; (c) the number and value of fish taken; (d) the quantity of fish exported under each of said leases during the last period of twelve months, for which such figures are available. Presented 12th April, 1907.—*Mr. Ames.* *Not printed.*
- 208.** Return to an order of the House of Commons, dated 9th January, 1907, showing, in respect of all contracts since 1st January, 1904, between the government and the Gallena Oil Company, of Toronto, for supplies to any of the railways of the government: 1. The tenders upon which contracts were based, and all tenders made by other parties for such contracts. 2. All correspondence and communications of the department and officers thereof, with the several tenderers or contractors, relating to such contracts, or tenders or supplies; also all correspondence and communications between such officers, relating to such tenders, contracts or supplies. 3. All advertisements, notices, statements, accounts, papers and vouchers, relating to such contracts or supplies, or payments thereof. Presented 15th April, 1907.—*Mr. Ames.* *Not printed.*
- 209.** Return to an order of the House of Commons, dated 9th January, 1907, for a copy of all reports, instructions, plans, agreements or documents, of every description, in the possession of the government, concerning, relating to, or touching upon the location, the erection, or the equipment of new

CONTENTS OF VOLUME 13—*Continued.*

- locomotive and car shops at Moncton, or the purchase of new machinery for the same. Presented 15th April, 1907.—*Mr. Ames*..... *Not printed.*
210. Return to an order of the House of Commons, dated 11th of March, 1907, showing the total amount of money in banks, to the credit of the government, at the end of each month during the year 1906, and the name of each bank. Presented 15th April, 1907.—*Mr. Armstrong*..... *Not printed.*
211. Return to an order of the House of Commons, dated 20th February, 1907, showing all the mineral, coal and other lands, water-powers, and other franchises in the vicinity of Grand Falls, on the Hamilton River, and also in the District of Mackenzie; and also in the Territory of Ungava, that have been applied for, leased, granted, disposed of, or otherwise dealt with, since the year 1896; together with the names and addresses of the applicants, lessees and purchasers, the prices paid, the quantity of land alienated, and the conditions, if any, attached to each of the grants or dispositions. Presented 17th April, 1907.—*Mr. Boyce*..... *Not printed.*
212. Return to an order of the House of Commons, dated 11th March, 1907, for a copy of all papers, reports and correspondence, in connection with the Doukhobor colonies in Saskatchewan, from October 1st, 1906, to date. Presented 17th April, 1907.—*Mr. Cash*..... *Not printed.*
213. Return to an address of the House of Commons, dated 8th April, 1907, for a copy of all memorials, petitions, resolutions, correspondence or documents of any description in the possession of the government, relating to or referring to the recent appointment of a senator to represent the district of Rougemont. Presented 17th April, 1907.—*Mr. Ames*..... *Not printed.*
214. Return to an order of the House of Commons, dated 11th February, 1907, showing: 1. What works of a public nature have been undertaken in the counties of Compton, Richmond and Sherbrooke, respectively, by any department of this government since 1896 to date. 2. All sums of money, apart from the usual expenditure in connection with the maintenance of postal and customs department, that have been expended in these counties, respectively, since that date. 3. For what purposes these sums were expended, and to whom paid. Presented 19th April, 1907.—*Mr. Worthington*..... *Not printed.*
215. Return to an address of the House of Commons, dated 18th December, 1906, for a copy of all orders in council, advertisements for tenders, tenders, specifications of every kind, plans, drawings, reports, letters, telegrams, correspondence, contracts, agreements and other documents and papers of every kind, touching or relating to the construction of a post office in the city of Winnipeg, since the year 1900. Presented 19th April, 1907.—*Mr. Borden (Carleton)*..... *Not printed.*
216. Return to an order of the House of Commons, dated 11th February, 1907, for a copy of all letters, reports and other papers connected with the building of a wharf at North East Harbour, Shelburne County, N.S. Presented 19th April, 1907.—*Mr. Perley*..... *Not printed.*
217. Return (in part) to an order of the House of Commons, dated 6th February, 1907, for a copy of all letters, accounts, vouchers, cheques, correspondence and documents relating to any amount paid to Mr. R. T. McIlreith, barrister, of Halifax, for legal services, by the government of Canada, during each of the fiscal years ending, respectively, 30th day of June, 1902, 1903, 1904, 1905 and 1906. Also relating to all amounts similarly paid to any legal agent or representative of the government at Halifax during each of the fiscal years ending, respectively, 30th June, 1891, 1892, 1893, 1894, 1895, 1896 and 1897. Presented 19th April, 1907.—*Messrs. Crocket and Johnston*..... *Not printed.*
218. Return to an order of the House of Commons, dated 10th December, 1906, for a copy of all papers and correspondence, relating to the adoption and the application of section 9 of the Act of 1885, amending the Consolidated Revenue Act of 1883, now subsection 4 of section 148, of chapter 34 of the Revised Statutes of Canada; this Act treating of two-year maturing spirits in bond. Presented 19th April, 1907.—*Mr. Robitaille*..... *Not printed.*
219. Report of Mr. Augustus Power, K.C., Commissioner appointed to report on the matter of *Louise F. Wiley vs. Fred. T. Congdon*. Presented 19th April, 1907, by Hon. F. Oliver..... *Not printed.*
220. Extracts from a report of the Committee of the Privy Council, approved by the Governor General on 26th May, 1906, and 5th July, 1906, respecting certain ordinances passed by the council of the Yukon Territory. Presented 20th April, 1907, by Hon. F. Oliver..... *Not printed.*
221. Return to an order of the House of Commons, dated 4th March, 1907, showing: All coal lands leased, sold, or otherwise disposed of, from the 1st of January, 1906, to date, giving the area disposed of, the party to whom, the consideration therefor, the assignments made, if any, the date thereof, and the name of the assignee in each case. Presented 24th April, 1907.—*Mr. Lake*..... *Not printed.*

CONTENTS OF VOLUME 13—*Concluded.*

- 222.** Census of Statistics. Bulletin 1, Wage-earners by Occupations. Presented 25th April, 1907, by Hon. S. A. Fisher *Not printed.*
- 223.** Return to an address of the Senate dated 7th December, 1906, for copies of all correspondence respecting a site or sites for a public building in the town of Glace Bay, N.S., between any member of the government and all other parties; the area of the sites, the price of each, the date of the purchase, the date of each payment, the name of the seller of each site, the report or reports of the government engineer, showing lots recommended and those not recommended by him, and all notes or memoranda referring to said sites. Presented 15th April, 1907.—*Hon. Mr. McDonald (Cape Breton)*. *Not printed.*
- 224.** Return to an order of the House of Commons, dated 28th November, 1906, for a copy of all correspondence and other papers since the year 1896, between the city of Toronto, the Harbour Commissioners of Toronto, or any other persons, and the Dominion government, relating to, (a) the dredging or deepening of Toronto Harbour and the approaches thereto at the eastern and western gaps, or the shoals outside of said entrances; (b) the building of breakwaters, piers or other works for or in connection with such entrances at the eastern and western gaps to said harbour. Presented 27th April, 1907.—*Mr. Macdonnell*. *Not printed.*
- 225.** Supplementary return to 166. Presented (Senate) 28th February, 1907. *Not printed.*
- 226.** Return to an address of the Senate dated 20th March, 1907, asking for all correspondence between the government of Canada or any department thereof, and the government of Prince Edward Island, in 1901 or 1902, respecting the per capita allowance payable to that province, as provided for in the British North America Act, and how the said allowance should be computed on the population of the province, as ascertained by the census of 1901. Presented 5th April, 1907.—*Hon. Mr. Ferguson*. *Not printed.*
- 227.** Return to an order of the Senate, dated 6th February, 1907, asking for a statement indicating in so many columns: 1. The names, christian names, age and nationality, of all persons who have been appointed to any position in the customs house at Quebec, since the 1st of July, 1906. 2. The names of the persons who were replaced by those new appointments, specifying at the same time whether the persons so replaced were replaced by reason of their death, their retirement, or their dismissal, and by whom they have been replaced. 3. The names of the persons who recommended each of these new appointments. Presented 27th April, 1907.—*Hon. Mr. Landry*. *Not printed.*

SUMMARY REPORT
OF THE
GEOLOGICAL SURVEY DEPARTMENT
OF
CANADA
FOR THE CALENDAR YEAR
1906

PRINTED BY ORDER OF PARLIAMENT



OTTAWA
PRINTED BY S. E. DAWSON, PRINTER TO THE KING'S MOST
EXCELLENT MAJESTY
1906

To His Excellency the Right Honourable Sir Albert Henry George, Earl Grey, Viscount Howick, Baron Grey of Howick, a Baronet, G.C.M.G., &c., &c., &c., Governor General of Canada.

MAY IT PLEASE YOUR EXCELLENCY,—

The undersigned has the honour to lay before Your Excellency, in compliance with 3 Victoria, chapter 2, section 6, the Summary Report of the operations of the Geological Survey Department for the calendar year ending December 31, 1906.

WILLIAM TEMPLEMAN,
Minister of Inland Revenue.

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SUMMARY REPORT
OF THE
GEOLOGICAL SURVEY OF CANADA
FOR THE CALENDAR YEAR 1906

The Honourable WM. TEMPLEMAN, M.P.,
Minister of Inland Revenue.

SIR,—In accordance with the Geological Survey Act, 53 Victoria, chapter 11, 1890, I have the honour to submit herewith the Annual Report relating to the operations of this department. Special prominence is given, as in the past, to matter of immediate economic importance; the report also contains short descriptions of new explorations and of original observations and deductions by the several officers engaged in field work.

In order to expedite publication this report is presented without the customary sketch maps. These maps, too rough to be of permanent value, have never given a result proportionate to the work entailed by their compilation, and it is believed that their suppression will enable the field officers to devote much more time to the production of full records and accurate delineation of their explorations. In the form of separate bulletins these records and maps will give to the public definite information upon specific subjects, thus obviating the necessity of a search through bulky volumes dealing with a variety of matter relating to widely scattered areas through this vast Dominion.

It is obvious that there are many areas too large, and subjects too complicated, to be confidently reported on after only one season's work. In such cases the full report cannot be issued until the field labours are completed, but meantime the annual bulletin will fill a temporary want until the finished report completes the work.

EFFORTS TO PROMOTE PROMPT PUBLICATION AND EFFICIENT DISTRIBUTION OF REPORTS.

The main causes of complaint against the Geological Survey have been the delay in publication of reports and maps and the difficulty of obtaining them when published. These complaints have, in the main, been well-founded, and efforts are now being made to remedy the causes. Reasons for delay in publishing the results of field investigations are numerous, but the following scheme will, it is hoped, secure the speedy issue of information to the public:—

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1. Press bulletins giving information concerning all matters of public interest in regard to the mineral resources of Canada are issued at frequent intervals by the department, and are sent to all the important newspapers of the Dominion.

2. Arrangements have been made whereby the director's report will be issued as part I. of the annual report, that of the statistical branch as part II., and others of economic or national importance as succeeding parts in the order in which they are ready for printing. These parts, or supplements, will be issued as sessional documents, and will as such receive the benefit of a wide distribution from the Printing Bureau. An extra edition of each will, however, be printed for the department for its own distribution and future needs. Reports of a purely scientific character will be printed, as formerly, by the department. Hitherto the practice has been to print an edition of 3,800 copies of all reports of an economic character; of this edition 1,000 were printed as separates and the remainder were held for binding in an annual volume. This volume, in which the word annual becomes a misnomer, was frequently issued two or three years late, owing to delays which occurred in the procuring of some of its reports or maps. Only annual volumes were sent out to public libraries, boards of trade, scientific institutions and those scientists whose names were included on the department's special distribution list; consequently the general public has not received the reports until years after their publication. It has, therefore, been decided to discontinue these annual volumes, in lieu of which there will be a quarterly distribution of all publications issued by the Survey to all those now on the department's list, which list has lately been considerably augmented.

3. Earlier distribution of reports and bulletins on certain localities and subjects will be made to those persons directly interested, while attention will be called through the medium of the newspapers to the publications of such issues.

4. A small charge to cover the cost of printing has hitherto been made for all maps and reports issued by the department. This, an excellent idea in theory, has not worked successfully in practice. It has been found to be a continual source of petty irritation to the public, while the amount received has scarcely paid for the labour of collecting. With your consent it was decided to cancel this charge and the maps and reports of the Geological Survey are now sent free to any *bona fide* applicant in Canada.

During the spring of this year stock was taken of the number of undistributed publications printed by this department; they were found to total 192,000 copies. Many of these were catalogues of exhibition collections long out of date and six tons of this matter were sent to the contractor as waste paper. A list of surplus reports in stock was compiled and sent to the principal libraries and other public institutions of Canada, England and United States. It has resulted in the distribution of reports to fill breaks in incomplete sets. A goodly reserve is being kept for future use and the remainder is being distributed in places of public access where a better fate awaits them than that of mouldering away in the cellars of the Museum.

5. In order to place before the public some idea of the subjects contained in the Survey's reports a new catalogue of publications has been issued and is being distributed. This catalogue, which has been carefully compiled, gives a list not only of all publications issued in chronological order but of those relating to locality, author and

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classification, and it is hoped will do away with frequent complaints made regarding former lists as to the difficulty encountered in locating reports or maps on any specific area. In addition to the general list a smaller one dealing only with reports on economic subjects will in future accompany all publications of the department.

6. In order to reach the prospectors and others directly interested in certain localities a number of copies of the maps relating to each district has been sent to the Gold Commissioners of British Columbia and Yukon, while sets of maps as complete as possible have also been supplied for distribution to the provincial mining authorities of Quebec and Nova Scotia.

These are the efforts towards publicity and distribution now being taken by the department, and it is hoped they will fully meet the wants of the public, especially as the Geological Survey is always ready to impart any information possible in its power to all seeking it either personally or by letter.

It is a pleasure to state that the intimate relations necessary between a publishing department such as the Geological Survey and the Printing Bureau are of the most friendly character, and are rapidly tending to decrease the former irritating delays in the publication of reports. These cordial relations are mainly due to the agreement made between Dr. Dawson, C.M.G., and myself, in accordance with which one officer alone—the editor—makes all arrangements, under my directions, with the Bureau, and is solely responsible for everything appertaining to the publishing department. If the work of the engravers and binders were only as prompt as that of the printers there would be little cause for complaint, but unfortunately the present system of engraving and printing of maps, whereby the work is given to outside firms, over whom this department has no control whatever, leaves their issue at the mercy of each and all of the engravers, a position to be deplored at present and in the near future remedied.

NEED OF LARGER APPROPRIATION.

The following tabulated statement as given by the Mines Section of the Geological Survey illustrates the growth of the mineral production of Canada during the past twenty years :

1886.....	\$10,221,000
1890.....	16,763,000
1895.....	20,649,000
1900.....	64,618,000
1905.....	68,574,000

The value of the mineral production of Canada is now, therefore, nearly seven times what it was twenty years ago, and a further large increase is expected for the current year. During these twenty years the sums devoted by the Dominion Government in aid of mining and allied industries have been those under appropriations for the working of the Geological Survey and of the Mines Branch of the Department of the Interior. The actual figures are as follows :—

1886.....	\$ 115,053
1890.....	117,430
1895.....	129,054
1900.....	118,783
1905.....	173,555

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These figures show that while the value of the mineral industries has increased 600 per cent the increase in the amount of government aid has been only a twelfth of this; in other words the government expended in 1886 as aid to mining one dollar for every \$88 produced, while in 1905 it spent the same amount, one dollar, for every \$348 produced.

During the same period the number of field geologists on the staff of the Geological Survey, owing to lack of money to pay them, has only increased slightly, while the field of work has been extended greatly and the opening up of many important mining areas has greatly increased the work required of the staff.

In 1886 mining operations were mostly confined to the older provinces and a portion of British Columbia; at the present the mineral production of Nova Scotia and New Brunswick shows a natural increase, the northern portions of Quebec and Ontario are developing large mineral areas, while new industries have been embarked on in the older portions of these provinces. In northern Manitoba and Keewatin important discoveries of minerals have been made and their active development only awaits the completion of the railways now being built towards Hudson bay. The enormous influx of settlers to the prairie provinces demands that close attention be given to the building materials and fuels found everywhere underlying the plains and only awaiting intelligent development to become of the greatest economic importance to these almost treeless regions.

It is, practically, since 1886, that the great mining industries in southern British Columbia have been created and that the coalfields along the Crow's Nest and main lines of the Canadian Pacific railway have been opened. Coal of the best quality has been discovered extending northward along the eastern flanks of the Rocky mountains and at several places in the interior of British Columbia.

All these call for a close examination by officers of the Geological Survey. The mining of metalliferous ores is increasing along the Pacific coast and northward in British Columbia; important discoveries of ores of gold, silver and copper are being made in southern Yukon, in fact the extension of mineral discoveries throughout the more inaccessible portions of the Dominion is increasing at such a rate that it is only with the greatest difficulty that an intelligent track can be kept of them.

The above remarks show the ever increasing work that falls to the field staff of the Geological Survey.

By including every available officer on the staff twenty-five field parties may be formed under reliable officers for summer field work, and with these it is the task of the department to satisfy the exploratory, geological and mining demands of half a continent.

Geologists are made, not born, and several years must be spent in the making. At present there are few trained men outside the service who are capable of undertaking the work performed by the staff of this department. Owing to the small salaries paid, in comparison with the pay of private individuals and corporations, those who are so trained refuse to accept government employment.

The rapid extension of mining, and the belated knowledge that a technically trained man is as necessary in mining as in any other industry, has created such a demand

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for skilled economic geologists as to greatly increase the value of their services and to cause the demand to considerably exceed the supply.

Recognizing these facts, efforts are being made to recruit the field staff by an agreement with the several mining schools of Canada, whereby places will be given on the summer field parties to a number of the best qualified students with a view to partly training them for the work of the Geological Survey during their college vacations and ultimately giving them permanent positions upon the staff if they are found to be adapted to the work.

In past years summer assistants were recruited from all ranks of life, and the young men were paid correspondingly poor salaries. It is now proposed to limit the assistants on field parties to undergraduates and after the first year to pay them a salary sufficient to attract the best among them. In this manner it is expected that the staff of the Geological Survey will be recruited from the best and most efficient graduates of our mining schools; the process may be slow, but it is the best and only one by which a really efficient staff can be secured.

In the past the practice in the department of appointing young men at exceedingly low salaries and of advancing them by the ordinary fifty dollars annually has worked disastrously. It became the custom for students to enter the service for the excellent training afforded them and after a few years to leave to take positions where the salary was much greater than that paid by the government. This state of affairs is to a certain extent unavoidable, as the salary paid to a permanent employee, with a settled position in the government service, can never equal the prices offered by private corporations. That a certain number of the young men trained for the service will leave it when opportunity offers is well understood, but—if the percentage be not too great—this is not an unqualified misfortune to the country, as these highly trained men simply change their employers and pass from assisting the development of the mineral industries of the country at large to that of working a certain area under private auspices, whilst the knowledge and experience gained in the government service still prove of great benefit to the country in a more specific way.

In order to keep a goodly number of these young men in the government service, the minimum of pay upon the permanent staff of the Geological Survey has been raised, but there still remains a considerable difference between the poor salaries of the government officials and that of equally competent men engaged in similar work outside the service. It is to be hoped that recognition will early be given of the efficient work of the staff of the Survey and of the inadequate payment given for the same.

SPECIMENS FOR THE NEW MUSEUM.

The construction of the large and beautiful new Victoria Museum calls for the provision of exhibits to illustrate the natural resources of Canada. The collections now held by this department and the department of Marine and Fisheries form an excellent nucleus for the new Museum, but they both require many additions in order to be in any way representative of the resources of the Dominion. The minerals, rocks and fossils displayed or stored in the Geological Survey Museum are, it is true, sufficient to make an excellent display in these particular branches, but the ethnological and natural history collections are lamentably wanting in many respects. For this

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reason the sum of \$3,500 was included in the estimates of 1906-7 for the purchase and preparation of specimens for the new Museum. This money has been partly expended in acquiring from Dr. Newcombe his collection of Pacific Coast Indian curiosities. The addition of this collection to those already in the Survey makes the Western Coast Indian exhibit equal or superior to any in America.

Smaller ethnological collections appertaining to the Plains Indians have also been purchased, but much remains to be done in this direction before the exhibits can be considered fully representative.

A number of specimens of large animals have been secured and are being properly mounted. In order to procure more of these animals during the coming year a larger sum has been asked, with which it is proposed to purchase specimens from different localities in all parts of the Dominion. These specimens, when properly set up, will give a fair idea of the animals of the country and their variation according to locality.

It is also proposed to exhibit collections showing the various ores of the different minerals, their productions from mine, mill and furnace, and the finished result, thus affording an object lesson of the various mining and metallurgical processes employed in Canada.

Object lessons, also, in a different branch, will be afforded by the exhibition of cases containing specimens of destructive insects, not only in their final stage—the only form usually recognized by the general public—but in all the many phases of their peculiar metamorphoses.

EDUCATIONAL COLLECTIONS.

During past years it has been the custom of the Geological Survey to distribute free to the educational institutions of the country collections of minerals and rocks. It is now felt that this practice, though excellent in theory, has not met with the success anticipated, and that the failure of the scheme has been due partly to indiscriminate distribution, but more largely to the fact that for reasons of economy the collections have been sent out in a singularly unattractive form. Rough deal boxes packed with minerals accompanied by a mere list of names, are not in themselves likely to inspire interest, and as the schools to which they are sent often failed to provide a suitable case for the specimens, the collections frequently became scattered and lost, especially when sent to lower grade schools, with teachers lacking the knowledge to make use of them. During the past summer Mr. C. W. Willimott, assisted by Mr. A. McKinnon, has been employed securing material for larger and better collections than have hitherto been issued. One hundred of these will be made up this winter, each specimen being accurately labelled and placed in a pleasing cabinet, with a catalogue and text book, giving useful information in an interesting manner. These collections will be distributed to those educational institutions of a grade equal or superior to high schools. The present supply, of course, will not equal the demand, but it is hoped that a larger number will be issued the following winter, and that ultimately every high school in the Dominion will be supplied with a valuable collection of Canadian minerals and rocks so necessary in the teaching of geology.

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TRIP TO COBALT.

After my recent appointment to the office of director it was thought advisable, in view of the fact that my personal knowledge of Canada was confined to the eastern portions, that I should visit the western divisions, not only to obtain some acquaintance with the country and its requirements, but to meet and consult with the leaders of the mining and mineral industries. Previous to my departure for the west, advantage was taken of the kind invitation of Professor W. G. Miller to visit the important silver camps about Cobalt. Three days were spent under his expert guidance in looking over a number of the most promising mines and claims of this wonderful camp, and in meeting their owners and managers. Of course, on so short a visit, it would be presumptuous to offer an opinion upon the origin and probable extent of the ore bodies, but enough was seen to pronounce upon the phenomenal richness of the numerous veins, and to make a rough estimate of millions of dollars in silver shown on the surface and in the shallow workings of the claims. The question of the depth to which the silver will be found is an important one, but is one upon which no opinion can or should be given with the data at present available. Granting only a very moderate depth, there is ore in sight sufficient to produce millions, and only a portion of the veins has as yet been uncovered. There is no doubt that great values will be extracted from many of the properties about Cobalt; at the same time it might be wise for the investing public to consider the very large capitalization and abnormal prices of stock of many of these properties, and in consequence the large sum required from production to pay a fair profit on these small veins. Attention is also called to the limited area covered by the silver-bearing veins in this region and to the natural impulse to consider properties situated in the vicinity of bonanza claims as being themselves of great value, when the reverse is often the case. Cobalt is now in the throes of the inevitable great speculative boom, and prices are being advanced in many instances beyond the bounds of prudence and reason.

RELATIONS BETWEEN THE GEOLOGICAL SURVEY AND THE ONTARIO DEPARTMENT OF MINES.

Owing to the late date of the adjournment of parliament and to the transfer of this department from the control of the Minister of the Interior to that of the Minister of Inland Revenue, it was found impossible to leave Ottawa for the west before the end of July.

The journey to British Columbia was made by way of Toronto where a mutual understanding was arrived at with Mr. T. W. Gibson, Deputy Minister of Mines for Ontario, concerning the operations between the federal and provincial departments as to the scope and relations of each in order that they may work in harmony and avoid duplication of surveys. As the control of mines and mineral industries is vested in the provinces it is advisable that the Geological Survey should acquiesce as far as possible in the wishes expressed by provincial authorities as to the mining investigations they consider advisable.

During this conversation with Mr. Gibson, afterwards confirmed in writing, it became evident that the provincial department, while eager to reserve for itself all investigations into the economic mineral resources of Ontario, was willing to supply the Geological Survey with complete mineral statistics of the provinces at the earliest

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possible date and in a form suitable for publication in our Mines Section report, provided that the Survey would discontinue the collection of mineral data in Ontario.

A complete agreement as to the collection of these statistics requires fuller negotiations than can be contained in the form of an ordinary letter and the Survey will, at any rate during the present year, continue the independent collection of statistics in the hope of a definite settlement of this question at an early date.

It is proposed for the future to confine the work of the Survey in Ontario to the compiling and publishing of the systematic series of geological map sheets of the more settled parts of the province and to reconnaissance surveys in the northern portions.

INSPECTION WORK IN BRITISH COLUMBIA.

Part of the journey through British Columbia was made by way of the Crow's Nest branch of the Canadian Pacific railway to Rossland. A stop was, however, made at Fernie, where, under the guidance of Mr. J. McEvey, lately of this Survey, the mines of Coal creek were visited and the different methods of working the seams were examined. The collieries were being worked to their full capacity and all the coke ovens were burning. The plant at Fernie compares favourably with that of any eastern colliery.

At Rossland Mr. Brock was found at work with his party on the detailed examination of that camp and three days were spent with him in an examination of the geology both on and below the surface. Trips through the great Le Roi and Centre Star mines showed the vast spaces left after extracting the ores, while long levels and cuts through new ore bodies gave promise of several years successful mining. The general air of prosperity and quiet confidence about the mines and town is an indication that the period of depression has passed and that a new era has arrived in which the evils of over-speculation are happily absent. At Trail I inspected the smelter with Mr. Aldrich, who was able to point to several newly installed improvements.

From Rossland I was accompanied by Mr. Brock through the Slovan and Boundary districts. A visit was paid to the Hall smelter at Nelson, where a new plant is being installed to cope with the growing output of the mines. From Nelson a trip was made through the Slovan silver-lead district, beginning at Kaslo and continuing across to Slovan lake. On the way an inspection was made of the lately completed tunnel of the Rambler-Cariboo mines which taps the ore body at a much greater depth than had previously been attained in the district. The successful completion of this work—it has lasted two years—justifies the foresight of Mr. Zwiekie and the confidence displayed by the directors of the company in his judgment, for the finding of good ore at such a depth is of immense importance to the district where the rise in the price of silver has given new life to many mines that were practically abandoned. These encouragements, together with the advice and instructions contained in the report of the Zinc Commission regarding the value and best method of treating the zinc ores usually found associated with the lead and silver will, no doubt, go far to make Slovan as prosperous as formerly. No longer will it be necessary for each mine to erect large mills purely for the benefit to be derived from their photographs in prospectuses, and, if instead of each of the mines supporting a costly management staff they are managed carefully in groups, or worked under lease, there is little doubt that a fair profit can be

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realized from many of the claims now closed as unprofitable. The excellent results already obtained from both of these methods will probably lead to their trial throughout the silver-lead mining areas.

From Slocan we went to Grand Forks and examined the large and economically run smelter of the Granby Company which I was glad to learn later is looked upon as a model in Arizona and Mexico.

We next visited the low grade copper camp at Phoenix where the extensions of the older mines, and developments in new ones, evince the flourishing condition of the camp.

From Phoenix we drove to Greenwood where the furnace fires were for the time being drawn owing to the installation of a completely new and larger plant to smelt the ore of the Mother Lode and other mines in the vicinity.

A visit was paid to the Providence mine above Greenwood, where the conditions, like those of the other high grade mines of the district, are prosperous.

Mr. Brock left me at Greenwood and the journey was continued by train to Midway, the smelter of the Canadian Copper Company being visited en route. Here again the enlargement of the plant is a sign of the activity in copper smelting. From Midway the road leads over the Anarchist mountain through the Okanagan valley to Fairview where the mines are temporarily closed awaiting the coming of the railway and its attendant cheap rates. From Fairview the mountains were crossed to the Similkameen valley where the important Nickel Plate Gold mine is situated. Here I met Mr. Camsell who was working in the upper part of the valley about and beyond Princeton. Concerning the mineral prospects of that neighbourhood he was quite enthusiastic and there is little doubt that with the coming of the railway next year there will be great mining activity along the Similkameen, with excellent chances of the development of several low grade copper properties as good at least as those now being so profitably worked at Phoenix.

We visited the large cyanide works of the Nickel Plate and later ascended the long tramway to the mine on the summit of the mountain, where the large masses of ore are visible. Owing to lack of time, I was unable to go beyond Hedley and returned by Okanagan lake to the railway, thence proceeding to Vancouver for a conference with Mr. LeRoy who was at work on the coast and islands of the Pacific northward from the International Boundary. Mr. LeRoy was very favourably impressed with the prospects of many of the copper mines which he had visited on Howe sound and Texada island.

A visit was made to Victoria to confer, as in Toronto, with the provincial mining authorities. In the absence of Mr. W. F. Robertson, Provincial Mineralogist, the Hon. Mr. McBride gave an assurance of hearty co-operation and welcomed a continuation and enlargement of the work now being carried out by the Geological Survey.

My visit to British Columbia has given me some idea of the great extent and value of the mineral resources of the southern part of that province, from which a fair appreciation of the mining wealth of the whole may be gathered. Meeting, as I did, most of the prominent men engaged in the mining and mineral industries, excellent opportunities were afforded of learning their needs and receiving from them suggestions in the way of extension of, and improvement on, the present work of this depart-

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ment. A frank interchange of views between the mining men and the director can lead to nothing but benefit to both, and I am sincerely grateful to all of my new and old mining friends of British Columbia for their kind advice and promises of assistance in promoting the efficiency and utility of the Geological Survey.

VISIT TO MEXICO.

The International Geological Congress, whose members include many of the important geologists of all countries, meets every three years in the capital of some country for the interchange of geological information among its members. Its last meeting was held, by invitation of the Mexican government, in the city of Mexico, during September last, and it was thought advisable that I, as Director of the Survey, should attend it officially.

In order to arrive in time I left Victoria on the 29th of August and travelled by rail, passing through San Francisco, where a day was spent studying the effects of the recent earthquake. From Los Angeles the Southern Pacific railway was taken to El Paso. On this route lies the wonderful 'Salton sea,' a lake only a year or so old, formed owing to an attempt to divert a part of the Colorado river into an irrigation ditch. A flood caused the whole stream to leave its old channel and pass through the ditch, flooding a large area at the head of the Gulf of California, part in California and part in Mexico. It is said that the river has been restored to its old channel so that the danger of flooding many other hundreds of square miles is past.

Owing to wash-outs and accidents on the Mexican Central railway, the city of Mexico was not reached in time for the opening of the congress. A week was spent there attending meetings and on charming excursions to neighbouring points of geological interest. The acquaintance of many geologists from all countries was formed and much was learned from conversation with them and from the discussions at the meetings. Several important members of the United States Geological Survey were in attendance and from them was obtained a great deal of information that should be of value in our own work.

On the close of the Congress, I joined the excursion to the mining districts of northern Mexico, and thus reaped the advantage of seeing in very favourable circumstances the most important silver and copper mines. We visited the silver mines of Pachuca, Zacatecas, Guanajuato and Maripil.

At El Paso we were transferred to the hospitality of the Dodds Phepps Co., of which a Canadian, Mr. Jas. Douglas, is the principal stockholder. Under the kind and intelligent guidance of Mr. Ricketts we visited the great copper mines at Bisbee, Cananea and Nacozari, and the modern copper smelter at Douglas.

These visits to the most important mines of Mexico and Arizona have been of great practical benefit to myself, widening my experience, and it is hoped will prove of future benefit to the department.

Thanks are due to His Excellency President Diaz and to the Mexican government for lavish hospitality and courtesy. Signor Aguilera, director of the Instituto Geologico, and his staff were unsparring in their efforts to further the success of the Congress, and to them alone is due the success which attended the meetings in Mexico, and the excursions throughout the country. The kindness of the representatives of

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Dodds Phepps and Company in showing and explaining everything connected with their mines and plant will long be remembered by those who had the good fortune to be their guests.

GENERAL INDEX.

Since the new series of annual reports was commenced in 1885, sixteen volumes have been printed, each containing an average of more than a thousand pages. It is manifest that this enormous mass of information loses much of its value unless it is accompanied by a complete and intelligently compiled index. For some years past complaints have been received from scientists in all parts of the world regarding the absence of such a compilation, but it was practically impossible to give the work to any one outside the Survey, and if any geologist on the permanent staff undertook the index it would entail his losing three, or perhaps four, summers' work in the field. Dr. Bell, who was then acting director, finally decided to place the conduct of this work in the hands of the editor, who has been engaged on it for nearly eighteen months. The manuscript, which was finished in September, is now being thoroughly revised and should be ready for the printer early in January.

Since I became director I have had several opportunities of inspecting the work, which I am pleased to say is most admirably compiled, and which should form a standard reference work to Canadian geology for many years to come.

Special arrangements have been made with the Printing Bureau for the regular printing of this index, which it is hoped will be published in May next.

INTERNATIONAL NOMENCLATURE COMMITTEE.

Dr. Frank Adams, of McGill University, has kindly forwarded the following brief statement concerning the work of a special committee on the correlation of the Pre-Cambrian rocks of the original Laurentian area of Canada, the Adirondack mountains and eastern Ontario.

'At a meeting of the International Committee on Geological Nomenclature, held at Ottawa, Canada, on December 31, 1905, it was decided that a special committee on the correlation of the Pre-Cambrian rocks of the areas above mentioned, consisting of President C. R. Van Hise and Dr. Frank D. Adams, who had been appointed at a meeting held in Washington on January 2, 1903, should be enlarged by the addition of Professor A. P. Coleman and Professor J. F. Kemp, and that Dr. J. M. Clarke, State Geologist of New York, should be invited to appoint a representative on this committee. Dr. Clarke appointed Professor H. P. Cushing as representative of the Geological Survey of the state of New York. Dr. A. E. Barlow, of the Geological Survey of Canada, also took part in the work of the committee during a period of about ten days, when the committee was at work in the Adirondack mountains.'

'This special committee met at Whitehall, New York, on July 4, and spent a month in visiting the various parts of the Adirondack mountains, more especially the area about Mineville and Port Henry, in the eastern portion, the district about Lake Saranac and that about Theresa, near the northern border.'

'The committee then crossed the St. Lawrence into Canada at Kingston, from which place they proceeded by train to Tweed. Here they examined the district about Bridgewater and Deloro, and then went on to Bannockburn, and thence up the Hastings road to Bancroft. This road affords one of the finest sections of Pre-Cambrian rocks to be found anywhere in America. From Bancroft they went to the east, taking canoes down the Madawaska river, and visited the corundum-bearing rocks which are exposed along the course of this stream, devoting special attention to the district about Craigmount where corundum is so largely mined. They then returned to Bancroft and proceeded by train to Gooderham. From this point they examined the relations of the great Glamorgan batholith and the encircling limestone of the Grenville series. The committee saw that the batholith in question, which may be taken as a type of all the great batholithic masses of the region, cut through the limestone series, holding many included fragments of the latter, and that in some places at least the limestone was altered by the granite to a dark basic amphibolite, which was frequently partly digested by the granite and appeared in the latter as long basic schlieren. The committee also examined an occurrence of titaniferous iron ore which is found in a large gabbro mass in the vicinity of Gooderham.'

'From Gooderham the party went up the Buckhorn road, crossing the Glamorgan batholith to Haliburton, where the labours of the committee were brought to a close.'

'A report in preliminary form was drawn up upon the conclusion of the field work and received the unanimous approval of the committee. This report, in its extended and completed form, is now being submitted to the various members of the committee for their final approval, and will probably be ready for publication during the coming month.'

THE MINING INDUSTRY IN 1906.

It can be said without fear of exaggeration that the condition of the mining industry in Canada in 1906 has been one of large prosperity, that it has, in fact, achieved greater progress and given bigger returns than during any previous year on record. In the year 1905 the total mineral output reached almost \$70,000,000 as compared with but a little over \$60,000,000 in 1904, and while actual figures of production are not yet available for 1906, the activity evidenced in both the metalliferous and non-metalliferous mining will, no doubt, result in another large increase being shown. There has been during the year an active demand for nearly all mining products, and the higher prices realized, especially for the metals and their ores, have not only helped to increase the actual present output, but have stimulated development and prospecting throughout the country.

METALLIC ORES.

The increase in prices of metals during 1906 is distinctly shown by the following quotations. The average price of the metals for 1905 was as follows: Silver, 60.35 cents per ounce; copper, 15.59 per pound; lead, 4.7 cents per pound; spelter, 5.82 cents per pound; nickel, 40 cents per pound. During 1906 the prices of all these metals had increased, and in December, 1906, the quotations were as follows: Silver, over 70 cents per ounce; copper, over 22 cents per pound; lead, 5.75 cents per pound; spelter, 6.4 cents per pound; and nickel from 45 to 50 cents per pound.

Nickel.—The nickel-copper mines at Sudbury have been actively worked throughout the year and will show an increased output. Electric power has been introduced and the general efficiency of the works greatly improved.

Copper.—The actual output of copper in Eastern Canada outside of the metal obtained from the nickel ores above mentioned is comparatively small, but a great deal of work has been done during the year in the exploitation and development of copper properties.

British Columbia is now Canada's great copper producing province, and more particularly the great bodies of low grade, but easily mined ores of the Boundary district. The shipments from this district during ten months of 1906 are estimated at close on a million tons or greater than the total output for 1905. The smelting capacity of three furnaces in the district was considerably increased during the year. Dividends were declared by one company aggregating \$1,215,000.

The copper mines of the coast district in this province have been actively worked during the year as were also the ores of the Rossland district which are further mentioned under the heading 'Gold.'

Gold.—The gold output in Canada has been showing a yearly decrease since 1900 due to a regular falling off in the Yukon placer production, and this decrease has, in all probability, continued in 1906. In Eastern Canada the output has never been large, but Nova Scotia seems likely to make a better showing in 1906 than in the im-

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mediately preceding years. In British Columbia the gold production has shown a slow but steady increase which has to some extent counterbalanced the decrease in the Yukon output. In Rossland an important amalgamation of interests took place in the early part of the year. The War Eagle and Centre Star mines, the smelting works at Trail, with the St. Eugène silver-lead mines of East Kootenay, and other interests were united under one management known as the Consolidated Mining and Smelting Company of Canada. The consolidation is one which will, no doubt, tend to much greater stability in the mining industry.

The discovery of new ore shoots in the Centre Star and other mines, the payment of dividends by the Le Roi, the Le Roi No. 2, and the Consolidated Mining and Smelting Company, and the encouraging detailed geological work done by the Geological Survey under Mr. Brock, have all tended to put new life into the district and a bright future is looked forward to. The total ore shipments for 1906 may possibly not exceed or even equal those of 1905 owing to the unfortunate strike of coal miners at Fernie having caused the smelters to close down for some months in the latter part of the year for want of coke.

In Cariboo several properties, including that of the celebrated Consolidated Cariboo Hydraulic Mining Company, were acquired by the Guggenheim Exploration Company, and a large investment of capital is being made in the construction of many miles of new ditches, which will supply a more regular and larger supply of water for the working of the huge areas of gold bearing gravels this company possesses.

The Atlin placer deposits were worked about as usual, although a shortage of water had to be contended with.

The gold output of the Yukon will again apparently show a decrease. Official figures are not yet available, but from current reports apparently not more than \$6,000,000 is to be expected this year. In this district the large corporations are absorbing the smaller operators and the Guggenheim Exploration Company under the name of Yukon Consolidated Gold Fields Company has entered the field, buying up numerous claims. The company has already commenced the construction of ditches and flumes to provide water for operating their claims. Other large works are to be undertaken, such as the construction of reservoirs, a power plant, &c., and altogether a large number of men will be employed this winter.

Iron.—The iron industry has been active throughout the year, a good demand for all classes of iron products having been experienced and the iron furnaces have been operated probably more extensively than ever before. A new furnace plant is in course of erection at Port Arthur intended to utilize the ores of the Atikokan areas. The output of pig is likely to be larger than in 1905, and would probably have been still greater but for an unfortunate dispute between the Dominion Iron and Steel Company and the Dominion Coal Company in November regarding their coal contract.

Lead and Silver.—The argentiferous galenas of the Kootenay districts are again being worked on a large scale, the East Kootenay mines, St. Eugène and others, being large shippers during 1906.

The cobalt district of Ontario has attracted world wide attention during the year and is rapidly becoming an important silver producing district.

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Zinc.—The concentrating of zinc ores in British Columbia has continued with considerable success. The large zinc smelter at Frank, Alta., was sufficiently advanced for the first metal to be turned out in June. It is understood, however, that some further changes and improvements were found necessary before regular smelting could be undertaken.

NON-METALLIC.

Amongst the non-metallic class of minerals mined in Canada the more important are asbestos, chromite, coal, corundum, gypsum, mica, natural gas, petroleum and salt, besides the structural materials including the clay products, stone and lime and cement. The mining of all these products, and others of lesser importance, has actively progressed during the year. The coal mining industry especially has made good progress in the various fields exploited, Nova Scotia, Alberta and Saskatchewan and the Crowsnest Pass and Vancouver Island fields of British Columbia. In Alberta a rapidly growing population has created such a demand for coal that new mines are yearly opened up and a much larger output made. Nearly one half the coal mined at the Crowsnest pass is converted into coke to supply the rapidly growing demands of the smelting industry in British Columbia and for export. Labour difficulties have interfered to some extent with the operations at Fernie and at Lethbridge, the latter causing a shortage of coal at certain points in Saskatchewan which threatened to become serious. These difficulties have, however, been happily settled before the close of the year and no doubt in time to avoid any further serious trouble.

The asbestos mining in the Eastern townships of Quebec has been particularly active during the year, prices have been good and a large increase in mill capacity to handle the mineral is contemplated.

The chromite ores of this district have also been mined about as usual.

Gypsum mining in Nova Scotia and New Brunswick and to a lesser extent in Ontario and in Manitoba has been carried on with increased output. Higher prices have also been obtained in this industry.

The corundum of Ontario finds a ready market; mica has been in good demand and at higher prices, while natural gas, petroleum and salt industries of the Ontario peninsula have been worked as usual.

In the structural material class the production of clay products, such as bricks, tiles, &c., stone and lime, has to keep pace with the growth of the population. The increased use of cement in all kinds of structural work such as buildings, sidewalks and roadwork, bridges and monolithic work, &c., has caused a great demand for this product and a largely increased output is being made.

WORK OF THE FIELD PARTIES.

By the advice of the Minister of the Interior the field work during the past season was mainly confined to economic subjects, the investigations being carried on in (a) mining districts developed, (b) mining districts under development, and (c) districts along proposed routes of new railways. No parties were sent into the far north or into regions difficult of access, the chief idea being that exploratory work should advance from the known into the unknown. If this policy, as is intended, be continued, the explorations of the Geological Survey will spread systematically northward until the whole Dominion has been explored. As will be seen, the field parties may be divided into those performing exploratory work and those devoting their time to economic geology. Although the work of the former division frequently includes that of the latter, a tentative classification of the parties under these divisions shows seven engaged on economic geology, six on economic work of an exploratory character, six on exploratory work of a more or less economic nature, and five in special work relating to the mineral and natural resources of the country.

The geographical distribution was as follows:—

Two	parties in	Yukon.
Four	"	British Columbia.
Three	"	Alberta and Saskatchewan
Two	"	Keewatin.
Three	"	Ontario.
Two	"	Quebec.
Two	"	New Brunswick.
Two	"	Nova Scotia.
Four	"	general.

It will be observed that the causes to which this decrease in the number of parties is attributed are two. Primarily, it was deemed advisable to strengthen some of the parties in order to secure more rapid work in certain districts, notably Rossland and the Klondike; also, it was decided to confine the charge of field work almost wholly to officers permanently employed in this department, whose long training enables them to cover more ground and to produce from their observations better and more reliable reports than can be obtained from persons with little systematic training and experience. The decrease in the number of field parties has allowed a larger expenditure upon those sent out, thereby permitting an increase of assistance and better equipment. It is believed that the good work of the field officers during the past season justifies the newly inaugurated policy.

In addition to the work of the field staff, assistance has been freely given to the Superintendent of Mines in the compilation of a report on the iron resources of Canada. This assistance took the form not only of information acquired by the officers of this department, but of a complete set of maps, both in manuscript and print, to-

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gether with data relating to the iron ores of Nova Scotia, the result of several seasons' work in that province by Mr. Hugh Fletcher.

The following is a short synopsis of the work performed by the field officers :—

Mr. R. G. McConnell, assisted by Mr. Joseph Keele, geologist, and Messrs. F. H. Maclaren and F. O'Farrell, was engaged in measuring the volume, and estimating the values of the high level gravels in the Klondike district. This difficult work has, I am pleased to say, been successfully performed. There has not yet been time to prepare all the available data for the writing of a report on the matter, but so soon as the necessary calculations can be made a pamphlet on the subject will be issued.

Mr. D. D. Cairnes spent the season in the southern part of the Yukon, where quite a variety of valuable economic mineral deposits have been found and, although quartz mining has just commenced, it is progressing rapidly and in several localities. Considerable work is being done on the Windy Arm silver and gold properties with very good results indeed. Also about 700 claims were located on mineralized quartz veins about fifteen miles west of the W. P. and Y. R'y. between Caribou and Robinson.

Recent developments on the extensive copper deposits west of Whitehorse have shown them to be even richer than expected. Adding to this the fact that there is plenty of available anthracite and bituminous coal in the vicinity, the future looks bright indeed for this district.

Mr. O. E. LeRoy examined that part of the coast of British Columbia lying between the International Boundary and Powell river.

In addition to the purely geological work special attention was given to those formations which are of economic importance. The principal economic areas in the region examined are the Lynn Creek camp, Burrard inlet; the Britannia mineral zone, Howe sound; and Texada island.

Mr. W. W. Leach was chiefly engaged in delimiting the coal and copper areas in the Telkwa valley, B.C. So far as the coal is concerned this work presented considerable difficulty owing to the large amount of faulting and folding to which the coal measures have been subjected.

Mr. Charles Camsell was surveying in the Similkameen district, B.C. He reports most encouraging activity in mining, both for coal and for the precious metals. He makes a particular point of the large areas of low grade ores that abound in the district, areas which it seems probable will shortly be profitably mined.

Mr. Lawrence Lambe, Vertebrate Palaeontologist, was in the southern portion of British Columbia with a view to ascertaining the definite horizons of the Tertiary coal deposits and the correlation of the sedimentary beds.

Mr. R. W. Brock whose efforts have been so much appreciated in the Rossland, B.C. district, continued and completed his examination of the mines in that area. He is now engaged on his final report of the district, which will be published as soon as possible.

The work of mapping the Rocky Mountain coal districts has been continued by Mr. D. B. Dowling, and the area now receiving attention lies between the Panther and

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Clearwater rivers. Mr. Dowling's efforts were crowned with very great success, resulting in the discovery of a large coal field extending northward from the Saskatchewan to past the Brazeau. In view of its proximity to the Transcontinental railway and of the scarcity of high grade coals in the country to the east, this discovery is of great importance.

Dr. R. Chalmers continued his examination of the surface geology of the Great Plains, more especially in the provinces of Saskatchewan and Alberta. A few weeks were also spent in British Columbia towards the close of the season. The character and distribution of the clays suitable for the manufacture of common and pressed brick, fire-brick, sewer pipe, &c., were a special subject of inquiry. The water supply was also investigated and the quality of the soil noted as far as time and other circumstances would permit.

Mr. T. Denis, of the Mines Section, made a short investigation of the oil and gas fields of Alberta and southern British Columbia; he also visited the different coal fields of the mainland, for the purpose of obtaining such information as would bring up to date the records of the section. He is now preparing bulletins on the subjects of coal and oil, which will be published as early as possible.

He reports that a great deal of work is being carried on in the oil fields of southern Alberta, but that so far the results are not commensurate with the outlay. Nevertheless, the 'indications' are sufficient to encourage the operators, and not only are all the companies which originally started in this field some three years ago still operating, but several new ones have been added to their number.

The Western coal industry is very active, as will be seen by Mr. Denis' report of the year's development.

Professor J. Macoun made an examination of the country on both sides of the Transcontinental railway between Portage la Prairie and Edmonton, and writes enthusiastically on the agricultural possibilities of the district.

Messrs. Wm. McInnes and Owen O'Sullivan were instructed to explore the region along the proposed route of the Canadian Northern railway between the Saskatchewan and Fort Churchill. From their reports it appears that there are no serious engineering difficulties to be overcome, that Fort Churchill would form a suitable harbour and that there is a considerable amount of excellent agricultural land along the proposed route.

Mr. E. D. Ingall visited several localities between Port Arthur and Sherbrooke, Que., including the recently reopened Bruce Mines district, with a view specially to studying the copper deposits, the mining of which has been rendered more profitable by the rise in the price of that metal.

Mr. W. H. Collins was occupied in examining the country along the Transcontinental Railway location between Lake Nipigon and Lac Seul. He reports the western portion as auriferous and iron-bearing and well worthy the attention of prospectors, but on the east he found a region rugged, of little economic importance and presenting considerable engineering difficulties.

Mr. W. J. Wilson spent the summer in an examination of the country along the line of the Transcontinental railway from Makamik lake eastward to Bell river. Only a narrow strip varying from five to ten miles on either side of the line was explored.

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Most of the rivers and lakes in this area which had not been surveyed were traversed. He also examined the molybdenite area on Kewagama lake and found molybdenite on a small island in Seals Home lake. He found copper pyrites on the Harricanaw river and other points, and reports considerable quantities of good agricultural land in the area.

Dr. R. Bell received three months leave to visit England for the purpose of receiving the gold medal awarded him by the Royal Geographical Society of London. On his return he visited Cobalt, and afterwards the Bancroft district. Dr. Bell also journeyed to Mexico, to be present at the Geological Congress already referred to.

Dr. A. E. Barlow was engaged in the tracing eastward into the province of Quebec of the formations containing the rich silver-cobalt-nickel-arsenic ores now being mined to the west of Lake Timiskaming in the vicinity of Cobalt and Haileybury. For this purpose it was found necessary to closely examine geologically the townships of Guignes, Duhamel, Fabre, Laverlochere and Baby. Both districts are geologically identical, but on the Quebec side very large areas of the Cobalt series are overlaid by the quartzite and conglomerate of the Upper Huronian or the clays of the Pleistocene. The outcrops, therefore, of the Lower Huronian conglomerate and slate are small and often widely separated, so that the prospector and geologist have only a comparatively limited field for exploration. No mineral finds of great significance have been made.

Mr. A. F. Hunter continued examinations of the high level terraces of western Ontario.

In order to complete the surveys necessary for the Peterborough map sheet, Mr. W. A. Johnston was instructed to continue work in the area included in that publication. Afterwards he commenced work in Prince Edward county in order to further the compilation of the Simcoe map sheet.

Mr. Ernest Haycock continued surveys in the graphite and phosphate regions to the north of Buckingham. His work is now in such a finished state as will enable a full report to be compiled.

Mr. R. A. A. Johnston was surveying in the counties of Madawaska, Victoria, Carleton and York, N.B., in which region the probability of meeting economic minerals in payable quantities is remote. Mr. Johnston, however, speaks highly of the agricultural possibilities, as well as of future lumbering prospects, provided adequate protection be given the second growth on the forest areas that have already been so severely burnt.

Dr. R. W. Ells spent the season of 1906 in the detailed study of the formations around the city of St. John, N.B., and in obtaining materials for the compilation of a geological map of the city and vicinity within a radius of ten to twelve miles. In this work he was assisted by Mr. J. A. Robert, of this department.

An examination was also made of the principal mining districts preparatory to the publishing of a report on the mineral resources of the province.

Mr. Hugh Fletcher continued surveys in the western portion of Nova Scotia, while Mr. E. R. Faribault devoted his time to the gold areas north and west of Halifax. The revival of mining in this province has already been noticed in my remarks on the mineral industry for 1906. Mr. Faribault is at present engaged on a bulletin on the gold fields of Nova Scotia, which it is hoped will be published during the summer.

KLONDIKE DISTRICT.

R. G. McConnell.

The season's work consisted in measuring the volume and estimating as closely as possible the gold contents of the high level gravels bordering Hunker and Bonanza creeks. In this work I was efficiently assisted by Jos. Keele, geologist, and F. H. MacLaren and F. O'Farrell, topographers, all of the Geological Survey staff: I was also fortunate enough to secure the services of such experienced miners as Robert Henderson, the discoverer of the Klondike gold-fields, and A. B. McDonald.

In the course of the season all the important bodies of bench gravels along Hunker and Bonanza creeks, and the lower Klondike river, were measured as accurately as conditions permitted. The heavy covering of moss and muck which mantles most of the district rendered the definition of the back line of the gravels in a few places somewhat uncertain, but on most of the hills the outlines of the gravel areas could be closely followed by means of prospecting shafts.

The rocker was employed to obtain the gold values in the gravels. About 350 samples, measuring in most cases a quarter of a yard each, were rocked during the season. The samples where possible were taken in columns six feet in height. Where the gravels were shallow several continuous sections from the bottom to the top of the deposit were washed at intervals along the face. In the deeper deposits continuous columns of the lower gravels only were washed. Above a height of thirty-six feet, samples were taken at intervals of about twenty feet.

In estimating the gold contents of the various gravel deposits due allowance was given to the statements of miners in regard to the values obtained in drifting and hydraulic operations. In most cases the values given agreed very closely with the results of our own work.

No attempt was made to sample the once rich pay streak running through the upper Bonanza Hill gravels. The pay streak in all these hills has been drifted out more or less completely, only occasional pillars and small areas of ground which the miners were unable to reach remaining unworked. These contain the principal values, but their distribution is so irregular that it was considered a closer estimate could be formed by generalizing the results of the various hydraulic operations now in progress than by a limited amount of sampling done by ourselves.

In addition to the Hunker and Bonanza Hill gravels, tests were made of several areas of bench gravels along the Klondike below the mouth of Hunker creek.

Field work was completed at the end of September and Messrs. MacLaren and O'Farrell immediately left for Ottawa, and have been engaged since their arrival in working out the volumes of the various tills. This work, and the estimate of values which depend on it, cannot be completed in time to appear in this year's summary report but will be published later on.

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Mining on the Klondike creeks is at present in a transition stage. The individual claim-owner is being gradually replaced by companies owning groups of claims and working them with expensive plants. The fabulously rich placers which made Eldorado, Hunker and Bonanza creeks famous have been mostly drifted out and the gravels which remain are too lean, as a rule, to be worked with much profit by the early pick and shovel methods. The necessity for a more economic treatment of the gravels has been met by the introduction of dredges on the creek and river flats, and hydraulic plants on the hills. During the past season four dredges were at work in the district and three others were in course of construction. Dredging in the Klondike where the gravels are thawed presents few difficulties. The gravels are very uniform in size and include few large boulders. The shattered bed-rock is also easily excavated by the buckets.

The hydraulic miners have had to depend so far on a small intermittent supply of local gravity water, or on water pumped up from the creeks, and no large plants are consequently in operation.

The insufficiency of the local supply has induced the Yukon Consolidated Company to undertake the construction of a ditch and pipe line designed to bring water from a point on Twelvemile river to the camp. The line has a length of fifty-eight miles and a capacity of over 5,000 miners' inches. When completed it will add greatly to the productiveness of the district.

With twenty-five miles or more of proved dredging ground in the valley flats and tens of millions of cubic yards of low grade but still workable gravels on the benches profitable mining on the Klondike creeks is assured for many years.

Dominion, Sulphur and Quartz creeks on the Indian River slope were not visited during the season. The valleys of all these streams still contain considerable unworked areas of medium grade drifting ground. Quartz creek also is bordered for a couple of miles by an important white channel deposit only partly drifted out.

EXPLORATIONS IN A PORTION OF THE YUKON, SOUTH OF WHITEHORSE.

D. D. Cairnes.

I left Ottawa on May 18, with instructions to proceed to the southern part of the Yukon to investigate primarily, the economic resources of certain areas and, incidentally, to gather as much information as possible concerning the general geology and natural resources of the district, and to make such surveys as were required for a map to accompany the work. During the season I was very ably assisted by Mr. H. Matheson.

Windy Arm, Tagish lake, was reached by the usual route and after surveys were completed in the vicinity horses were procured from Whitehorse and work commenced to the north. Just at this time some discoveries of rich gold and silver bearing quartz were reported from about fifteen or twenty miles west of Robinson, which is about twenty miles north of Caribou crossing. We examined a great number of the most likely looking claims and continued south to connect with our previous work. Thence work was extended north of the Watson river to within about ten miles of Whitehorse, including the area of the Whitehorse coal field.

By this time, about September 18, the weather became so severe as to prevent further field operations. We therefore travelled down the river and examined the Tantalus and Five Finger coal mines, as well as the coal on Tantalus butte, and the surrounding country, securing sufficient detail by transit and compass surveys for a sketch map of the district. Afterwards, on my way south from Whitehorse, a couple of days were spent in the Windy Arm district inspecting the latest development in the different mining properties.

GENERAL DESCRIPTION OF DISTRICT.

The country, generally, consists of wide valleys separated by ridges and groups of mountains, the valleys often containing lakes running, for the most part, in a northwest and southwest direction, approximately parallel to the coast line to the west, but often intersecting in an intricate manner.

In the Windy Arm district the mountains are quite rugged and rise to from 4,000 to 5,000 feet above the valleys. The principal trees are black pine, fir, spruce, aspen and balsam poplar. Some of the valleys, as the lower part of the Wheaton River valley, are very thickly timbered, the tree-line being at an elevation of about 2,000 feet. Farther north, in places, the hills become lower and more rolling and west of Cowley and Robinson rock outcrops are often difficult to find. Extensive muskegs exist in places.

AREA SURVEYED.

The district surveyed this season comprises an area of about fifty miles long and twenty miles wide, extending from the British Columbia boundary on the south in a

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northwesterly direction to within about ten miles of Whitehorse, the eastern boundary running from Dugdale in a southwesterly direction to the east side of Windy Arm to connect with the northwest corner of Mr. J. C. Gwillim's map of the Atlin Mining district, B.C. The western boundary is approximately parallel to this direction and extends from the west side of Lake Bennett on the south to about twenty miles west of Dugdale on the north. In addition to this the sketch map, above referred to, in the vicinity of the Tantalus and Five Finger mines, is being prepared.

GENERAL GEOLOGY.

The geology, particularly in the southern part of the district, corresponds generally with that in the Atlin district, and the geological subdivisions as made by Mr. Gwillim are practically those which have been found best to adopt here.

Extending along the eastern side of the district, sometimes included in this area and at times lying to the east of it, is a rather straight range of limestone hills, probably of Carboniferous age. A few fossils were collected, but have not yet been determined. The limestones overlie a series of older slates, cherts and limestones, which outcrop in a number of places on both sides of Windy Arm and on Nares lake.

Overlying the limestones is a series of altered sediments including some fine-grained generally greenish rocks, which are at times difficult to distinguish from igneous rocks of later age; also some rocks presenting the appearance of much altered slates, although their slaty structure has disappeared. These sediments are in a few localities quite extensively altered to serpentines. The cherts, slates, and altered sediments are included in Mr. McConnell's Tagish series.

Along the western edge of the district are later rocks, the Coast granites, with outlying areas to the east, the granites themselves often becoming quite porphyritic, especially towards the edge of the series. Following along their eastern edge are some older schists, which are partly altered sediments and partly altered porphyries and may correspond respectively to Mr. McConnell's Nasina and Klondike series, in the Klondike gold fields.

Newer than the granites is a somewhat complex series of porphyrites, porphyries, diorites, gabbros, &c., which apparently represent rocks from the same magma, but which differ considerably in character on account of segregation, cooling under different conditions, &c. Towards the edge of this series is a rather complex porphyry, presenting on weathered surfaces the appearance of a conglomerate, due to portions of a harder porphyry being included in a more easily weathered one. The mines of the Windy Arm district are in this series, and for this reason I have called these rocks the Windy Arm series.

Overlying them are some sediments of Cretaceous or Jurassic age, consisting of sandstones, shales and conglomerates, the lower shale beds being considerably altered. A number of fossils were collected, but have not yet been determined. Towards the northern end of the district these sedimentaries are quite extensive and carry valuable coal deposits.

Porphyry dikes cut the sediments and the underlying formations. These later intrusives vary greatly in appearance, but one, carrying very large, long feldspar crystals,

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tals is very common. Overlying all, particularly towards the north, are basalt and scoria of recent eruption.

ECONOMICS.

Although numbers of claims had been staked at one time or another, quartz mining, except a certain amount of development on the copper properties just west of Whitehorse, was scarcely attempted until the latter part of the season of 1905, when Col. J. H. Conrad commenced work on the Windy Arm properties, and though so short a time has elapsed a great deal has been accomplished. The little town of Conrad, on the west shore of Windy Arm, has now several hotels, stores, restaurants, churches and so on, and a mining recorder's office. The whole southern part of the Yukon was formerly included in the Whitehorse mining division, but this summer the district became of sufficient importance to warrant subdivision, and the Windy Arm portion, including most of the Watson and Wheaton Rivers district is now in the Conrad mining district. A number of properties were worked continuously last winter and this summer, and considering the amount of development that has been done, several look very promising indeed.

Many difficulties were encountered. In addition to the fact that the mines are situated high up in the mountain, wood for fuel and timbering was difficult to secure; supplies and wages being high, prospecting work was expensive; and experienced miners were exceedingly scarce. The current wage paid is \$3.50 (including board) per day of eight hours.

The district is very accessible. Once the ore is landed on the beach by the aerial tramways now running, it is only a matter of ten or twelve miles around by Windy Arm and Nares lake to the railway at Caribou crossing, and a railway spur can easily be built along the shore for this distance. A good route is also possible from Log Cabin, on the W. P. & Y. R'y., via Whynton, B.C., to Conrad.

Practically all the mining claims in the area surveyed this season were examined and a detailed account of each will be given in the final report; at present, only a few of the most important points in connexion with the more promising properties will be given.

WINDY ARM PROPERTIES.

Some of the most important claims in this district, commencing at the north, are, respectively, the Big Thing group, Montana, Joe Petty, Aurora, Thistle, Uranus, M. and M., Vault, Venus No. 1, Venus No. 2, all owned by the Conrad Consolidated; the Ruby Silver, owned by private parties, and the Venus Extension, Beach, Red Deer and Humber No. 1, owned by the Anglo-American Company.

Big Thing.—This property is situated about five miles in a northwesterly direction from Conrad, and differs from all other properties in the district, in that it is in granite formation. In the rest, quartz veins run in true fissures in the porphyrites, &c., of the Windy Arm series. The principal vein on the Big Thing was struck this summer at the end of an eight foot drift. A crosscut was then run sixty feet on the vein, and a winze was sunk which was down about fifty-five feet at the time visited last, early in October. The vein, which dips into the hill and appears to be of the elongated lense type, was widening rapidly in the bottom, becoming almost flat, and

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was about ten feet wide. The ore is chiefly secondary quartz and is very porous near the surface, showing considerable leaching action. The minerals are mostly oxides and carbonates, which will eventually change to the sulphides, &c. A considerable amount of stibnite, arsenopyrite and pyrite was found near the bottom. Occasional very high assays, running into the hundreds, are obtained in gold and silver, and it is claimed that the ore body will average close to \$30 per ton.

The Montana is about four miles south of the Big Thing and, like it and most of the Windy Arm properties, is situated high up on the bleak mountain sides, and all wood, supplies, machinery, &c., have to be packed or pulled up, or carried up on the tramways. A \$90,000 double cable aerial tramway runs from the northern extension of the Montana, the Mountain Hero, to Conrad, a distance of 18,697 feet, and has its upper terminal 3,464 feet above the lower.

A drift was run for about 700 feet in on the vein which is from two to five feet in width, with a streak of rich ore eight to eighteen inches next the hanging wall, assaying about \$90. The rest of the vein is much leaner and may run \$20. The strike is about N. 45° W., with low dips to the southwest. An incline shaft is being sunk on the lead, and about the first of October, when last seen, at a depth of 320 feet, the vein was about eight feet from wall to wall, containing, however, over four feet near the centre, of almost barren, leached, and somewhat decomposed porphyrite intersected by quartz stringers.

The values are chiefly in silver, the chief mineral being galena, though native silver, silver chloride, lead carbonate, argentite, pyrrargyrite, tetrahedrite, pyrite and arsenopyrite are also found.

The Joe Petty is situated on the north side of Uranus creek, and contains a strong vein about six feet wide composed of alternating layers of decomposed iron-stained quartz and mineralized country rock. A shaft about fifty feet deep has been sunk on the lead and drifts run each way; at the end of a forty-foot crosscut that cuts the vein in the hill, drifts were also run. No work was done on the property this season.

The M. and M., to the east of the Joe Petty, holds a vein varying in width from twelve to fifteen inches, but it is high grade ore, and can be traced for a considerable distance. The high grade silver minerals, argentite, pyrrargyrite, and stephanite were seen here.

The Uranus is situated just across Uranus creek from the Joe Petty. The vein is quartz and is traceable for at least 2,000 feet, with an average width, where seen, of about three and a half feet. The chief minerals are arsenopyrite and galena.

On the *Thistle and Aurora*, higher up the creek, above the Uranus and Joe Petty, surface work was being carried on, for the greater part of the summer, and very rich ore is reported to have been found. The ore is chiefly quartz, carrying chalcopyrite, zinc blende, malachite, and the rich silver mineral stephanite.

The Vault is situated on the south side of Pooley cañon, about 3,000 feet from the beach. When last seen, in October, a drift on the vein was in over 300 feet. This is the same vein, in all probability, as the Venus No. 2, and can be traced for over 4,000 feet. It is in places twenty to twenty-three feet in width, being nearly all well

mineralized quartz. In places there are four to six feet of almost solid galena. The vein here, as on the Venus, varies greatly in width, and at times is not more than a foot or so, but on the Vault, so far, except at the surface, at the entrance to the tunnel, the vein is fairly uniform, much more so than on the Venus. An aerial tramway to the beach is under construction, and a shorter one spans the cañon for the transport of wood and supplies. On the whole, this is the most promising looking property in the Windy Arm district.

Venus.—A crosscut taps Venus No. 2 about one hundred feet from the entry and drifts were run in the lead about the same distance each way. Some stoping also was done, the vein being eighteen inches to sixteen feet in width. In the stopes there are four to eight feet of good ore which will probably average over \$20 in gold and silver. A crosscut intersects the vein at 544 feet where drifts were also run. The vein where opened up in the lower level is narrower and leaner than above, but the narrowing is not likely to be very extensive as the vein looks well both to the north and south.

The chief minerals are galena, lead carbonate, arsenopyrite, chalcopyrite, malachite, pyrite and a good deal of jamesonite and antimony ochre. The ore is chiefly argentiferous galena. Where the vein is wide it consists of alternating bands of quartz and more or less mineralized country rock.

A fifty horse-power gasoline engine operates a compressor here to run the machine drills used on this property, but water-power from Pooley cañon is being installed. An aerial two-bucket tramway 1,525 feet long runs from the lower Venus tunnel to the beach, the upper terminal being 958 feet above the lower.

Some very rich ruby silver ore is found on the Ruby Silver claim to the west of and adjoining the Venus No. 2. The vein is from three to eighteen inches in width.

On the *Venus Extension* are two veins about thirty feet apart. The upper seam has about four feet of good ore, over half of which was being sacked, when visited in October. The sacked ore will probably run \$50 to \$60 per ton. An incline sunk on the vein was down about forty feet. The lower seam has about two feet of ore, which is chiefly argentiferous galena with considerable arsenical iron and pyrite.

The Beach claim, lying to the south of the Venus Extension, and supposed to be on the same lead as the Humper No. 1, has over ten inches of ore claimed to average about \$150 in silver with probably \$5 in gold. The chief minerals are galena, argentite, zinc blende and pyrite.

The Red Deer has about six inches of, in places, almost solid galena, which is claimed to run over \$90 per ton.

The Humper No. 1 is a particularly promising property, though only about seventy feet of work, which was chiefly in drifts, had been done at the time of my visit. The vein, which can be traced for at least 1,700 to 1,800 feet, is from eighteen inches to four feet in width and carries a large amount of argentite, ruby silver and stephanite, as well as native silver, galena, and pyrite. About eight inches of the vein will average over 300 ounces in silver and a narrow streak of argentite which is quite persistent and has a width of half to three-quarters of an inch, runs 3,000 ounces in silver.

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Some native copper is found in the east side of Windy Arm, but the work done is insufficient to determine whether it exists in paying quantities.

The ore values given in this report were obtained from a number of samples taken and also from a great number of assay returns kindly shown the writer by mine managers, mine superintendents, prospectors and others, during the season.

WATSON AND WHEATON RIVERS PROPERTIES.

Considerable excitement was caused this season by the finding by D. Hodnett and J. Stagar of quartz carrying free gold and telluride minerals between the Watson and Wheaton rivers. The first claim, the 'Gold Reef,' was staked, on June 25, on Gold hill, which is situated about fifteen or twenty miles southwest from Robinson siding. Within ninety days of the staking over 700 claims had been located.

A belt, or belts, of schists, approximately half a mile wide, outcrops in a northwest and southeast direction, near the eastern edge of the granites, which often become porphyritic. Dikes of greenish porphyry and porphyrite occur in the granites, also near their eastern edge, and it is in this disturbed belt that the quartz veins were mostly found. They are, as a rule, very persistent and can sometimes be traced for several miles. Outcrops of quartz closely resembling each other are seen in almost straight lines, at short intervals, and with the same general strike from the Watson river to about eight or ten miles south of the Wheaton river, a distance of nearly twenty miles, and although most of the veins found were in this narrow belt, about two miles wide, Mr. Porter and others discovered, towards the close of the season, some deposits of quite pure stibnite, and other minerals, at a considerable distance to the west.

The first discoveries on Gold hill, Hodnett mountain and Mineral hill are all in the line of strike of the veins and just south of the Watson river. The main lead is, for long distances, ten to fourteen feet of almost solid quartz, in places fairly well mineralized with galena, argentite, chalcopyrite, malachite, and pyrite. The vein on the Gold Reef which is in the schists, and is well defined on the surface, appears to be four or five feet in width. A pocket or seam of very rich ore carrying coarse gold was found in this vein from which came also the rich telluride minerals, sylvanite, hessite and telluric ochre. Further work on this claim has disclosed, as yet, no more of the rich minerals.

A group of claims, the Custer, Alice M, and Ramon, staked just south of the Gold Reef on a grey copper lead looked somewhat promising, although no work had been done when seen. The width of the vein was somewhat indefinite on account of wash and slide rock, but is probably about six feet and appears to be well mineralized.

The Legal Tender, staked by Mr. J. Perkins, lies to the northwest of these properties, and is on a very steep rugged hill on the south bank of the Watson river. The vein is in a fissure in the granite, and is three to three and a half feet in width where exposed; it is quartz carrying a considerable amount of argentiferous galena with some chalcopyrite, malachite, and pyrite. The values are chiefly in silver and the vein is claimed to average about \$40 per ton.

On Big Bend mountain to the south of the Wheaton river and seven or eight miles southeast of Gold hill, and in the line of strike of the mineral belt, a number of claims

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were staked by L. Belnew, O. Dickson, J. Perkins and others on strong well-defined quartz veins carrying galena, chalcopyrite, pyrite, &c. Also southwest of this again, in the same direction, on Stevens mountain, and to the west of it, a number of similar looking claims were located by Messrs. Stevens, M. Gilliam and others.

In addition to occasional assays running as high as \$300 or over, a number of fairly average assays—from \$20 to \$60—were obtained in this section, but, with the exception of a small amount of work done on the Gold Reef, no attempt has been made to prove to what extent the veins are mineralized or what values they really carry.

Taking into consideration the large quantity of mineralized quartz in this part of the country and the small amount of prospecting done, the results appear very encouraging and should stimulate both prospectors and capitalists to investigate this belt more closely, particularly to the northwest and west. There are certainly some very rich ores in this section.

Coal, also, was found about two miles to the east of Gold hill, at the same horizon as that in the Whitehorse coal fields to the north, but whether it will be in payable quantities remains to be seen.

A group of four claims known as the Union Mines is situated on the hills just to the west of Annie lake, about nine miles due west of Lansdowne siding and about three or four miles east of Gold hill. These claims were first staked by W. P. Schnobel in 1898, and are supposed to cover the ground known as the 'Lost Mine.' Some development has been done on them and preparations are being made to work through this winter. A ten ton shipment of ore gave, according to Mr. Schnobel, returns of over \$20 per ton. The values are chiefly in silver, with a little gold.

WHITEHORSE COAL.

Several seams of anthracitic coal are located in an area known as the 'Whitehorse Coal' and outcrop about twelve or fourteen miles in a southwest direction from Dugdale siding. A tunnel about sixty feet long has been run on one of these seams and a few open cuts have been made; otherwise the coal is entirely undeveloped. The strike at the tunnel is true north 63° west with 42° dip to the northwest. The general strike of the measures, which are quite regular and were traced for over twelve miles, is about north 74° west. The seams measured were nine feet eight inches, ten feet four inches, and two feet six inches, respectively. The samples taken run high in ash, but they were surface samples and with depth the ash will be very considerably less. Probably a number of other seams exist, as the measures have not been prospected to any extent, although they are very favourably situated for so doing, and a small amount of work should give much definite information. There is a very good grade from the W. P. & Y. railway into these claims and, considering their proximity to the Whitehorse copper deposits, the town of Whitehorse, and the Watson and Wheaton Rivers claims, this coal should prove of considerable value in the near future.

TANTALUS MINE.

This mine is situated on the west side of the Lewes river, about one hundred and ninety miles down the river from Whitehorse, being somewhat less than half way to Dawson. As the coal outcrops here on the river banks it is well situated for economic

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working. The cars are run out of the tunnels, pulled by cable up an incline, from which the coal is dumped into bunkers, ready for loading. Most of the river steamers burn this coal, of which about 7,000 tons will be loaded this season.

Three workable seams are opened up though only the lower two are being mined at present; others may yet be found as the formation is heavily covered in most places. The coal is worked by the stall and pillar system from two tunnels, which were in about 700 feet when visited in October. Although the seams are dirty, the coal can easily be sorted, but as wages are \$5 with board for underground, and \$4 with board for surface work, this has not been done as yet.

The following section was measured near the end of tunnels :—

Bottom seam—

Coal.. . . .	2 feet 4 inches.
Shale.. . . .	0 " 7 "
Coal.. . . .	2 " 0 "
Shale.. . . .	0 " 6 "
Coal.. . . .	2 " 11 "
Shale.. . . .	4 " 0 "

Middle seam—

Coal.. . . .	2 " 3 "
Shale.. . . .	0 " 2 "
Coal.. . . .	0 " 7 "
Shale.. . . .	0 " 2 "
Coal.. . . .	2 " 0 "
Shale.. . . .	0 " 2 "
Coal.. . . .	1 " 8 "
Shale.. . . .	7 " 0 "

Top seam—

Coal.. . . .	3 " 0 "
Shale.. . . .	

These measures are quite regular, and can be traced for over twenty miles down the Nordenskiöld river to the south and over ten miles to the north, showing that there is an enormous amount of coal in this district; when the measures have been prospected they may be found to extend much farther. Only coal near the river is, at present, of economic value. The dips are to the east and vary from 24° to 40°. Samples taken show the coal to be a bituminous coal that yields an average of about 75 per cent of a firm coherent coke.

At Tantalus butte, across the river from the Tantalus mine, the same measures again outcrop, but dipping to the west, showing the presence of a synclinal fold in between. The coal outcrops are near the top of the butte about four hundred feet above the river, having wash and terrace material covering the formation lower down. The best seam seen had five feet of good, firm, clean looking coal with one foot more of coal and shale on the bottom. Other seams seen were dirty and narrow, but there may be good ones obscured by the drift, &c., as practically no work has been done, except small surface cuttings. Altogether, the general conditions of the measures are quite similar to those at the Tantalus mine and this property will probably be worked in

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the near future. The surface samples obtained did not give a firm coke, but this coal is likely to coke with depth.

FIVE FINGERS MINE.

This is situated on the east side of the river about eight miles north of the Tantalus mine. A considerable amount of coal has been shipped from here, but the old workings, being dangerously situated on the steep clay and sand banks of the river, are not now used. The slope, at present being sunk, is to the north and in safe ground, and at the time visited was down about 525 feet, dipping to the east at 16°. The seam at this depth was about two feet wide, and was apparently becoming wider. It had once narrowed to about six inches. An average of two feet yielded 55.5 per cent of firm coherent coke. These measures are not the same as those at the Tantalus mine, but are below them. The upper measures outcrop in the valley to the east of the ridge of hills just above the mine.

CONCLUSION.

Considering that quartz mining has so lately commenced in the southern part of the Yukon, the results are exceedingly encouraging. Just to the north of the Windy Arm and Watson and Wheaton Rivers properties are the rich and extensive copper deposits west of Whitehorse. The Pueblo, in particular, after this season's development, presents an enormous surface showing of copper ores. A Whitehorse smelter is a probability in the very near future, especially as there is plenty of available coal in the metallurgical coke. Plenty of water power is also obtainable from Miles cañon.

In conclusion I wish particularly to thank Col. J. H. Conrad, Robt. Lowe, Wm. Grauger, Theo. M. Daulton, and others for assistance during my season's work and for courtesy shown to myself and party.

ON SURVEYS IN NEW WESTMINSTER DISTRICT AND
TEXADA ISLAND, B.C.*O. E. LeRoy.*

The area comprised by this season's work extends from the 49th parallel to the mouth of Powell river, a distance of over ninety miles along the main coast of British Columbia. This includes Burrard inlet, Howe sound, Jervis inlet, the islands adjacent to the coast, and Texada island.

From Burrard inlet to the International Boundary the country is underlain by conglomerates, sandstones and shales of Miocene age. These rocks are but slightly disturbed and have low dips to the south. In a few of the sandstone beds small irregular seams of lignite coal are found, but so far no bed of any value has been discovered. The whole area is covered to a considerable depth by glacial and alluvial deposits, and it is only along the south shore of the inlet that the rocks outcrop. In Stanley park and on Fairview heights, Vancouver city, these sedimentaries are cut by dikes of basic lava, but are of very limited extent.

North of Burrard inlet lies the coast range, and in its northern extension as far as Powell river; it is composed of a series of subordinate ranges which run approximately at right angles to the trend of the main coast. The elevation of these ranges is from three to five thousand feet, with individual peaks of one to three thousand feet higher.

A dense forest growth occupies the gentler slopes and the relatively narrow valleys, the principal woods being the Douglas fir, cedar, hemlock and spruce. The steeper slopes are either bare or support a sparse growth of stunted pine.

The streams are nearly all steep grade, and will furnish power as local conditions demand. The stream draining the Clowhom lakes into Salmon Arm and Powell river are of special importance. The former has a fall of over sixty feet and the estimated horse power is twelve thousand, the latter has a total fall of about one hundred and twenty feet and it is estimated that 30,000 horse power could be developed.

The coast range is an enormous batholithic mass of plutonic rocks which vary in composition from the most acid granite to a basic gabbro.

Lying on this batholith and usually occupying depressions are areas of older rocks. These consist of a great variety of massive and schistose rocks of igneous origin, together with limestones, conglomerates, quartzites, and slates representing remnants of the ancient roof of the batholith. These areas are of great economic importance, as nearly all the mineral deposits of any value are either in them or along their contact with the batholith. Both the granite-gabbro batholith and the associated rocks are cut by a large series of dikes which are mainly diabases.

Thormanby, Merry, and Texada islands are underlain by rocks of the Vancouver series, consisting of two formations. The lower is largely volcanic and is made up of

altered ash rocks, chlorite and hornblende schists, porphyrites, and agglomerates. The upper formation is limestone and has a limited distribution along the northeast shore of Texada island, between Van Anda and Blubber bay. It has a length of seven and a half miles and a maximum width of two. Both formations are of economic importance, especially the limestone. The Vancouver series is cut by numerous dikes of porphyry, greenstone, felsite and garnetite, and also by larger bodies of granite, which are extensions from the coast range batholith. Sandstones of Cretaceous age occur along the shore of Gillies bay on the south side of Texada island.

Sandstones also occur on the mainland east of Grief point, between Wolfsohn and Scow bays. From information received it would seem that the formation has a considerable distribution inland. Small seams of impure lignite coal have been found but no beds of any value have been discovered.

Glacial deposits are of limited extent in the coast range. Boulder clays occur at the head of Howe sound on the east side, on Anvil island, where they are used in the manufacture of brick, on Gambier island, and in the vicinity of Gibson landing.

In the region embraced by this season's work there are, in addition to numerous isolated mineral claims, three areas of special importance. They are the Lynn Creek camp, the Britannia Mineral zone and Texada island.

The Lynn Creek camp is about eight miles north of North Vancouver. It has an area of five square miles, and about thirty-five claims have been staked. The rocks are banded siliceous and massive hornblende and epidote schists surrounded by syenites and granites. The ores are zinc blende, pyrite, chalcopryite, molybdenite and magnetite. Very little development work has been done beyond the actual assessment work required by the Provincial Mining Regulations.

The Britannia Mineral zone lies on the east side of Howe sound twenty-three miles from the entrance. The zone has a width of one and one-half miles along the shore and extends inland about eight miles. The rocks are conglomerates, quartzites, slates and sericite schists. The mineralization is confined almost wholly to the silicified sericite schists. The ores are mainly chalcopryite and pyrite, the former occurring in lenticular areas and masses while the latter is finely disseminated through the schist and quartz. Both carry appreciable values in gold and silver. On the western half of the zone there are three principal groups, the Goldsmith, Britannia and Empress.

The Britannia Copper Company's mines are 3.8 miles from the beach, and 3,300 feet above sea level. The company has 8,500 feet of lode which has a maximum width of 600 feet. The deposit is essentially a low grade proposition, but the enormous amount of ore in sight, and its situation, present most favourable advantages for economic mining and large output. At present the ore is mined only on the Jane claim at the Jane bluff and Mammoth bluff. The method of mining is by tunnels, crosscuts and stopes, and glory holes. The ore is conveyed to the beach by a Riblet aerial tramway, the shipping ore going directly to the bunkers and the concentrates to the mill.

About 350 tons a day are mined at present, but it is the intention of the company to greatly increase their output at an early date. The ore is shipped to the company's smelter at Crofton, Vancouver island.

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The Empress mine lies east of the Britannia, across the divide, in South valley. Development work, principally by tunnelling, is being carried on with a view of reaching the shipping as soon as possible.

The Britannia West Copper Company is situated on the west side of the sound and almost due north of Britannia beach. The ore body is 1,500 feet square and consists of an impregnated zone in granite porphyry. Small quartz veins are numerous and carry bornite.

At present the company is engaged in building a tram line from the mine to the beach, and in constructing a concentrating mill and other mine buildings, and no ore will be mined until these are completed.

TEXADA ISLAND.

On Texada island the more important ore deposits are either in the limestone formation, or along its contact with eruptives or with the schists of the underlying series.

High grade bornite and chalcopyrite associated with felsite and garnetite dikes occur in chutes in the limestone. Smaller bodies of these sulphides, together with those of lead and zinc, are found along greenstone and diorite dikes, and also in brecciated zones in the limestone.

At the south end of the limestone band, along its contact with granite, porphyrite and chlorite schist, there are about twenty outcrops of magnetite distributed over half of one square mile. The surface showings indicate extensive ore bodies. A considerable part of some of these deposits, especially along their borders, is largely impregnated with pyrite and chalcopyrite, and in places the magnetite could be mined for the copper content.

The contact between the magnetite and chlorite schists and the limestone is marked by a series of small but high grade deposits of chalcopyrite and copper carbonates. They are, however, only superficial and have been nearly all worked out.

In the volcanic series underlying the limestone the ores occur principally in fissure veins in porphyrites and chlorite schists. Galena, chalcopyrite, zinc blende, pyrite and magnetite associated with quartz and calcite gangue are the principal ores. Many of these deposits lack permanence in depth, and their gold and silver values are very much lower than in the similar sulphides in the limestone.

At present the only producing mines on the island are the Marble Bay, owned by the Tacoma Steel Co., and the Cornell, operated under lease by a Seattle syndicate. The Puget Sound Iron Co's. magnetite deposits, and the Copper Queen mine, both of considerable promise, have not been worked this season. The Loyal and Commodore mines are still engaged in development work, and have not yet reached the shipping stage.

The Marble Bay mine is now 760 feet deep, and the ore chute at that level is over 40 feet long, with a maximum width of 20 feet. The ore is mainly bornite, which is disseminated through green felsite and garnetite. The copper, gold and silver values have steadily increased with depth. About 1,100 tons a month are mined and shipped to the smelter at Tacoma.

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In the early part of the summer the Cornell mine was pumped out down to the 260 foot level, and the ore on the 160 and 260 foot levels is being stoped out and shipped to the smelter at Ladysmith. The present output is between 500 and 600 tons a month. The ore and its mode of occurrence are similar to those of Marble bay.

The limestones of Texada and some of the coast granites afford good stone for structural and ornamental purposes. Marbelized areas in the limestone have been quarried in the past and some good grade stone produced. The Tacoma Steel Co. have quarries and limekilns on Marble and Limekiln bays. A lime of excellent quality is produced which is in much demand both in the home market and Java. The granite quarries on Granite and Nelson islands, at the entrance to Jervis inlet, are both producing excellent building stone. The former is owned by Kelly and Murray, of Vancouver, and the latter by the Ellis Granite Co., of Seattle.

Work has recently been resumed at the slate quarry on Deserted bay, Jervis inlet. A good grade of slate has been produced in the past, but the amount of waste that had to be handled was one of the serious drawbacks. It is stated, however, that some of the outcrops a little farther inland will permit a more economical development.

At the head of the North arm, Burrard inlet, two quarries are being operated by the Vancouver Quarry Co. and the Coast Quarries, Ltd., respectively. At present no building stone is quarried, the granite being used solely for concrete work and road metal. On Fairview Heights, Vancouver, a basic lava is quarried for road metal.

THE TELKWA MINING DISTRICT, B.C.

W. W. Leach.

In accordance with your instructions, I left Vancouver on May 25, travelling to the Skeena river by way of Ashcroft and Quesnel, this route having been chosen in preference to that via the coast and river on account of the reported scarcity of men and horses in the Bulkley valley.

THE BULKLEY VALLEY.

It is only within the past few years that much attention has been paid to prospecting in this region, at least in regard to quartz and coal, as the whole of this country has previously been run over by prospectors in search of placer gold. In recent years, however, many claims have been staked at various points in or adjacent to this valley; the most important localities being the Babine range, the headwaters of the Zymoetz or Copper river, and on the Telkwa river and its tributaries. It was considered advisable to confine operations for this season to the last-named district.

The Telkwa river joins the Bulkley at a point about sixty miles above Hazelton (at the mouth of the Bulkley), where the new town of Aldermere is situated. The only means of communication with the outside world at present is by pack trail either to Quesnel, 300 miles to the south, or to Hazelton and thence down the Skeena to Essington by river steamer; as, however, the Skeena is navigable only at certain stages, this route cannot always be depended on.

At the junction of the Bulkley and the Telkwa rivers, the former occupies a wide valley, the river itself being confined to a narrow secondary valley cut through gravel terraces to a depth of from 100 to 150 feet. The Telkwa valley is also terraced for a distance of about twenty miles, when the bottom of the valley rises above the level of the terraces.

About thirty or forty miles west of the Bulkley lies the main Coast range, an exceedingly rugged and alpine chain of mountains, flanked on the eastern slopes by a series of volcanic ridges in which the Telkwa takes its rise. These ridges give the general impression of a desiccated plateau with a general and gentle slope towards the south and west, showing precipitous faces towards the north and east. The topography generally is very irregular, the various streams, as a rule, heading in comparatively low passes and following erratic courses to the main valleys, leaving in many cases isolated areas of flat-topped mountains.

The Coast range itself presents an unusually unbroken front, stretching in a continuous array of sharp and jagged peaks as far as the eye can see in a north-westerly and southeasterly direction. Numerous and large glaciers are constantly in view along the eastern slopes of the range.

GEOLOGY.

The rocks of the Telkwa valley may be roughly subdivided into four main divisions consisting, in ascending order of:—1st. The crystalline rocks of the Coast range. 2nd. A great thickness of volcanics. 3rd. The coal-bearing beds; and, 4th. A series of eruptives more recent than any of the above mentioned.

Of the first little can be said; they constitute the back-bone of the Coast range and where seen consist of gneisses, schists, granites, &c., but were in no case closely examined.

Younger than these, and overlying the greater part of the Telkwa watershed, is a great series of volcanic rocks consisting chiefly of tuffs, agglomerates, andesites and other flow rocks. These rocks are more or less regularly bedded and vary greatly in appearance in different parts of the field. No attempt was made to ascertain their thickness, but it is probably not less than 5,000 feet. These rocks probably belong to what Dr. Dawson has named the 'Porphyrite group' (Report of Progress, 1876-77, p. 90, and Report of Progress, 1879-80, p. 101 B.) of the Cretaceous, but, as no fossils were found this season, no evidence of their age beyond their lithological resemblance to those described by Dr. Dawson is forthcoming. Generally speaking, it may be said that red colours predominate towards the top of the series, the beds consisting of reddish andesites, breccias and tuffs, in many cases amygdaloidal with inclusions of calcite and zeolites. Green is the characteristic colour of the base of the series, the beds being composed largely of fine-grained greenish feldspathic rocks, often amygdaloidal and containing much calcite and epidote.

These beds are important, inasmuch as the majority of the mineral claims which have been staked in the district are located in them.

Immediately overlying these rocks and possibly unconformable to them, although both have been subsequently folded and faulted to such an extent that their immediate relationship to one another is somewhat doubtful, occurs a series of rocks composed chiefly of clay shales and containing a number of important coal seams. The lower member of these beds consists of a coarse, loosely-cemented conglomerate mainly composed of pebbles of the underlying volcanics, in places shading into a coarse grit and not more than sixty feet in thickness in any place seen, but on account of its characteristic appearance and permanency throughout the field it affords a very valuable reference horizon when prospecting for coal. This is followed by some thin clay shales, with a few soft, thin, crumly beds of light-coloured sandstone succeeded by more clay shales and coal, the shales being often carbonaceous and containing many beds carrying numerous yellow-weathering clay ironstone nodules. These are the youngest sedimentary rocks represented in the district and, although not of great thickness (in no case seen showing more than 30 feet in all), they are of considerable importance on account of the coal contained therein.

All of the above rocks are cut by a series of eruptives consisting of coarsely crystalline porphyritic rocks which have thrown out dikes in all directions and have crumpled and dislocated the volcanic flows and coal-bearing strata along their contact to a very great extent. Their importance is great as they have apparently afforded a channel for the ascent of the mineral-bearing solutions, as it is along their contact with the

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volcanics that practically all the mineral claims have been staked. Their influence on the coal has been very great, as it has been found that, as the main eruptive areas are approached, with the resulting increased disturbance of the strata, the coal becomes much more anthracitic in character. The coal seams themselves have been cut by numerous dikes, in many cases accompanied by faulting; a fact which will materially affect future mining operations.

COAL.

The problem of delimiting the coal areas in this district is one of extreme difficulty. The exceedingly soft nature of the coal-bearing rocks and their consequent failure to resist erosion has resulted in their removal everywhere from the higher ridges, only a few isolated patches remaining in the valleys. The total thickness of the coal formation being small, probably not in excess of 300 feet, and the folding and faulting being considerable, it is probable that even in the lower valleys the volcanic rocks occupy a large extent of the area, the coal rocks having been removed by denudation; this is proved to a certain extent by the volcanics outcropping in various places in the valleys of Goat creek, Mud creek and of the Telkwa river, usually brought up by the action of faulting but in several instances cropping along the axis of a denuded anticline.

The only natural exposures are to be found in the creek bottoms in the few places where the streams have cut through the heavy covering of drift of the wide-terraced valleys. Away from the creeks no exposures need be looked for until the higher ridges are reached, and these are in all cases composed of volcanic rocks, the contact being invariably marked by a drift covering. It will, therefore, require very close prospecting before the extent of the coal areas is proved.

There are, at present, four companies holding coal locations in this neighbourhood, all of which have done some prospecting of a desultory nature.

The Cassiar Coal Company, whose property lies in part on Goat creek, a large tributary of the Telkwa from the southwest, have stripped several seams about six miles up that stream. The following section in descending order was measured by the writer in 1903 :—

	Feet. Inches.	
Clay shale.....		
Top seam—		
Coal with a few small clay partings....	12	0
Clean coal..	7	7
Clay....	2	0
Grey sandy shale and covered, about.....	30	0
Middle seam—		
Coal...	1	5
Clay shale....	2	7
Coal with a few irregular clay partings....	14	5
Shale with ironstone nodules....	3	3
Coal...	2	0
Grey clay shale with nodular ironstone bands, about.....	50	0

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prospecting tunnels have been driven and a shaft sunk with the intention of proving the number, size and condition of the seams at this point. At the time of the writer's visit No. 1 tunnel had been driven a distance of eighty-five feet across the strike of the measures, the strata here dipping at about thirty degrees. Three seams had been cut, in ascending order, four feet, three feet three inches and four feet, respectively, in thickness.

No. 2 tunnel, seventy-six feet in length, also cross-cutting, had passed through two seams, the lower six feet and the upper four feet thick. The roof of the six-foot seam is missing, a fault having cut through the seam here, but, it is probable that this is the same bed that has been shown in a natural exposure a short distance down the creek, where about ten feet of coal is in sight.

No. 2 tunnel cuts the strata at a slightly higher horizon than No. 1, and it is possible that other seams exist between the end of No. 1 and the entrance to No. 2.

Near the entry to No. 1 tunnel a shaft had been sunk to a depth of twenty-three feet to prospect the strata at a lower horizon than could be reached by the tunnels, but no coal had been found.

The coal measures at this point being nearer to the later eruptive areas are more highly flexed than those farther down Goat creek, evidences of faulting are abundant, and the basin has narrowed down to a great extent. Although in all probability the same seams are represented here as those mentioned before on the Cassiar Company's land, the character of the coal is entirely different, as the following analyses show:—

	Moisture.	Vol. com. mat.	Fixed carbon.	Ash.
1. Seam 2 ft. 4 in. 200 ft. down creek from No. 1 tunnel (non-coking)	0.80	8.20	81.60	9.40
2. Six foot seam of No. 2 tunnel (non-coking)	0.90	9.90	75.80	13.40

No. 1 analysis by British Columbia Provincial Assayer, (See Report of Minister of Mines, B.C., 1905).

This coal is firm and bright and may be classed as a semi-anthracite, and should make a most excellent fuel of its class.

As has already been mentioned, on the nearer approach to the newer eruptive areas the older rocks, including the coal beds, have been highly disturbed and the resultant heat and pressure have had a marked effect on the coal, altering it from a bituminous to a semi-anthracite; it must be expected, however, that more difficulties will be met with in mining, due to the probable greater frequency of faulting and increased intensity of the folding.

Similar conditions, probably if anything intensified, prevail at the property of the Telkwa Mining, Milling and Development Company, situated on Coal creek, a small stream running into Goldstream, one of the headwaters of the Morice river, and not far from the head of the south fork of the Telkwa river; here a number of seams of good coal have been opened up. The disconnected nature of the work done, with the disturbed condition of the strata, renders it almost impossible to be sure of the relative positions of the seams and whether several of the openings are on the

same or different seams. It is fairly certain, however, that four different workable seams have been uncovered; in descending order these have the following respective thickness :—Four feet two inches, four and one-half feet, four feet, and seven feet three inches. No analyses have, as yet, been obtained from this coal, but in general appearance it bears a strong resemblance to that from the Transcontinental Syndicate's property; if anything even more anthracitic in nature.

Where these seams have been uncovered the area of coal-bearing rocks is very narrow, probably not more than a few hundred feet in width. It appears to lie on the line of, and on the downthrow side of a great fault, and represents a small remnant of a once great coal field now mostly removed by erosion; it is probable, however, that to the southeast, in the main valley of Goldstream a much wider belt of coal land will be found to exist.

With regard to this field as a whole it may be said that wherever the coal formation has been exposed faults were seen, not, as a rule, of any great size, but in such numbers as to be a matter of serious importance to future mining operations. The coal has also been cut by numerous dikes and nearly everywhere is somewhat severely flexed. These facts, taken in connection with the uncertain extent of the several areas, seem to render it imperative that systematic and careful prospecting should be undertaken, well in advance of regular mining. Some method of boring could possibly be utilized to determine the position and the nature of the strata underlying the great gravel deposits of the terraces; until something of this sort is done it will be impossible to define the limits of the several coal areas. It is possible that in certain cases mining could be successfully carried on by stripping the overlying gravel and shales from the coal, where not of too great depth, a method that has been somewhat extensively utilized in the anthracite fields of Pennsylvania.

MINERAL CLAIMS.

Hunter basin, situated at the head of Cabin or Fourmile creek, a tributary of Goat creek, was the first locality visited. The country rock here consists of bedded volcanic rocks, red and greenish andesites, agglomerates, &c., tilted at comparatively low angles, but occasionally showing locally more severe crumpling, often accompanied by faulting. Across the ridge to the south, at the head of Glacier and Webster creeks, an intrusive area of coarsely-crystalline granitic rocks is found which seems to have had an important relationship to the mineralization of the district, as it is along the borders of this area that many claims have been staked, notably in Hunter basin, Hankin basin, Dominion basin (at the head of Goldstream), and various locations on the heads of Sunrise and Glacier creeks. The eruptive mass is itself in places impregnated with iron pyrites, which has resulted in the weathering of the rocks to a bright rusty yellow, giving a characteristic colouring to the mountains.

In Hunter basin the veins are, as a rule, small, and appear either in narrow irregular fissures or as replacements along lines of crushing. The 'King' and 'Rainbow' claims are good examples of the former. On the 'King' a shaft had been sunk, said to be fifty feet in depth, but full of water when seen. The vein, at this point, is about two and one-half feet wide and is in places well mineralized with bornite and chalcopyrite, the ore occurring in irregular lenses or pockets; it is reported to carry good values in silver and copper.

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On the 'Rainbow' ore of a different class is found, consisting chiefly of highly micaceous specular iron with some iron pyrites, bornite, chalcopyrite and copper carbonates. There appear to be two or more small irregular veins, more or less parallel. Where the most work had been done on one vein it varied from one to ten inches in width, practically all mineral.

On the 'Waresco' claim the ore seems to occur along a crushed zone from four and a half to five feet in width, the country rock having been decomposed and replaced in part by minerals consisting of copper carbonates, copper glance, chalcopyrite and bornite.

Numerous other claims of a similar nature are to be found in this neighbourhood, but very little work has as yet been done in proving them.

Dominion basin at the head of Goldstream is near the opposite border of the Glacier Creek granite area. The country rock here is composed of grey and greenish volcanics not so much disturbed as at Hunter basin, but with generally regular light dips to the southwest. These rocks are cut by a fine-grained, brownish-coloured dike, about forty-five feet in width, which can be plainly seen on both sides of the valley which it crosses about at right angles. It is along the edges of this dike that various mineral claims have been staked, the Dominion and the Black Jack being the most important. It would appear that this dike has afforded a channel for the ascent of the mineral-bearing solutions which have penetrated laterally along the bedding planes of the volcanics, where most readily attacked, decomposing and replacing the country rock in part with secondary minerals and ore. It seems reasonable to suppose, therefore, that the ore bodies will be found to occur in a succession of steps, where the more readily decomposed strata of the volcanics are met with, and will reach their maximum thickness in the immediate neighbourhood of the dike, gradually disappearing at increased distances from it. The ore consists chiefly of micaceous specular iron, chalcopyrite, copper glance and copper carbonates with a gangue of altered country rock, quartz, calcite and epidote.

Another and larger area of intrusive rocks occurs near the head of Scallon creek, an important tributary to the south fork of the Telkwa from the west, extending across the divide to the headwaters of the Morice and main branch of the Telkwa. This rock has sent out numerous dikes in all directions into the surrounding volcanics, and has also caught up and included in it many patches of the latter. Near the contact of these two formations and along the dikes from the former, a large number of mineral locations have been made including the Duchess, the Anna-Eva and the Evening groups on Howson creek, the Starr group on Starr creek and numerous other claims.

The Duchess group owned by the Telkwa Mines, Limited, is situated on the north side of Howson creek near its head. This property has been opened up by a short tunnel about twelve feet long, all in ore. The ground about here is rather heavily drift-covered and, as yet, but little work has been done, so that it is very difficult to gain an idea of the nature of the deposit. It appears probable, however, that the ore occurs in a large dike from the neighbouring eruptive rocks at or near its contact with the volcanic country rock, the volcanics themselves, near the dike, being largely decomposed and in places mineralized and with much epidote developed. The extent of the ore body is not yet shown, but at the entrance to the tunnel it is at least twelve feet wide and can be traced longitudinally for several hundred feet, the whole mass being more

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or less highly mineralized with pyrites, chalcopyrite and hematite, weathering to a well-defined iron-cap on the surface. The gangue consists largely of the decomposed and highly altered dike rock with many small quartz stringers parallel to the dike walls.

A short distance down the creek, on the same side, the Evening group is situated, the property of the Telkwa Mining, Milling and Development Company. This appears to be of a very similar nature to the Duchess, but the hillside here being less heavily drift-covered the ore can be traced more rapidly. The mineral apparently is contained in a dike from twenty-five to thirty feet in width, cutting, at a narrow angle the bedded volcanics, which are here tilted at high angles and in places much altered; the whole width is more or less mineralized with irregularly distributed lenses and bands of higher grade ore, as in the Duchess, consisting of chalcopyrite, pyrite and hematite with considerable quartz and remnants of the original dike rock. This deposit has been opened up by cuts at irregular intervals for a distance of about 1,500 feet, in all of which ore is shown.

On the ridge on the opposite side of Howson creek, and consequently farther away from the eruptive rocks, a number of claims have been staked including the Anna-Eva group, the Iron-Horse group, the War Eagle, Granville, Strathcona, Homestake, Walter and many others. All of these show a somewhat similar condition of affairs to that noted at the Duchess and Evening; the mineral occurring in dikes, in streaks parallel to, and generally richer near the walls, and usually is associated with quartz, serpentine, calcite, epidote and other secondary minerals. In places the volcanic country rock is likewise decomposed and mineralized alongside of the dikes. None of these claims appear to be heavily mineralized as are those across the ridge.

Across the ridge, at the head and to the west of Howson and Scallon creeks, in Starr basin, a number of claims are located. The ore here is usually found at the contact of the eruptive and volcanic rocks. This contact is very irregular in outline as the volcanics have been much shattered, and many patches of varying size have been caught up in the intrusive rocks; these small areas are usually highly altered and often somewhat mineralized.

At the Starr group, the ore seems to be developed along two parallel crushed zones in the volcanics near the contact, about two and three feet in width, respectively. The mineral, which is irregularly distributed, consists of pyrite, chalcopyrite and copper carbonates, in a gangue of quartz, calcite and altered country rock.

Although time was not available to visit the headwaters of the Zymoetz (Copper) river or the Babine mountains, where many claims have been located, it may be of interest to note here that many good looking specimens of galena ore said to be from these localities were seen by the writer.

A great part of this district has been over-run by forest fires, but sufficient timber remains in many of the valleys to furnish mine props, &c., as well as supplying the local lumber market, for many years. The principal trees are jackpine, spruce and balsam.

Enough information was obtained for the compilation of a map covering the greater part of the Telkwa basin and immediate neighbourhood. Triangulation (using British Columbia government township surveys as a base), panoramic sketches and traverses of the main trails and streams was the method adopted.

THE SIMILKAMEEN DISTRICT, B.C.

Charles Camshell.

The district in which the field work was this season carried out was that portion of the Similkameen Mining division of British Columbia, lying about and to the south of the town of Princeton; the object being to commence a topographic and geologic survey of a sheet, which shall embrace the whole of the Similkameen district, to be eventually published on a scale of four miles to the inch with a contour interval of 200 feet. Interest in this section of southern British Columbia has been greatly increased in the last year or two by the probability of its being shortly traversed by one, if not two, separate lines of railway; and although it has long been known to contain valuable deposits of gold, silver, copper, platinum and coal, the lack of lines of communication with markets for these products prevented any extensive development of these deposits. With the advent of the railway, however, the country has a promising future, and already some of the principal claim owners are making preparations to open up their properties with a view to the shipping of ore in the near future.

The lack of any detailed geologic information has been a great drawback to the prospectors in the district, for up to this year no attempt has been made by this Department to do much geological work since the publication of Dr. Dawson's map in 1877.*

The field work requisite for the compilation of a suitable map of the whole district must of necessity occupy several seasons, so that, to satisfy the immediate claims of the district, it was deemed best to confine the work of this session to the more important sections where economic minerals had been discovered and mineral claims located. Commencing on the boundary line where it crosses the Pasayton, and tying on to two prominent monuments of the Boundary Survey, a skeleton triangulation was run northward to Princeton, taking in a belt five miles on either side of the Similkameen river. The mineralized areas of Roche river, Copper and Kennedy Mountain camps were connected together on this skeleton, and the geology of these camps studied more carefully than the rest of the country. The boundaries of the Tertiary coal basin about Princeton were defined, and this, with the Copper Mountain camp was plotted on a topographic map of half a mile to the inch with 100 foot contours.

The early part of June was very wet, but no rain fell from the end of June until early in September, so that the bush fires which started at the end of July remained unchecked for several weeks, during which the pall of smoke rendered it impossible to carry on the triangulation. For this reason the original intention of carrying the triangulation up the Tulameen river from Princeton had to be abandoned, and the important camps of Bear creek, Boulder creek and Champion creek in this section were only done geologically, and not connected up with the other camps.

* Dr. Dawson also spent a part of the season of 1888 in a study of the rocks of the Tulameen river, that district having come into prominence a year or two previously owing to the discovery of some very rich placers, and a short account of his observations appears in the Summary Report for that year.

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Both in the topographical and geological work Mr. J. A. Allen rendered material aid and made a very efficient assistant.

On May 28, I arrived at Penticton where a pack train and outfit were obtained, and from here the journey of seventy-five miles to Princeton was made on horseback. The latter place was selected as headquarters for the season. Though it is quite possible to continue the field work in the eastern part of the district well on into October, operations were suspended in September, and on the 25th of that month I left Penticton for Rossland, Phoenix and Greenwood, where some days were spent in a comparative examination of their ore bodies with those which I found in the Similkameen district.

PHYSIOGRAPHY.

The Similkameen river forks at the town of Princeton, the west branch being known as the Tulameen and the south branch as the South Similkameen. Twenty miles up the South Similkameen again forks, dividing into the Pasayton and the Roche rivers. The name, Roche river, was originally applied to a smaller branch of the stream flowing in twelve miles above the mouth of the Pasayton, but in recent years it has become customary to refer to this branch of the river as the Roche, while in reality it should retain its original name of South Similkameen.

Both the Roche and the Pasayton rivers draw their water from the high range of mountains lying on and to the south of the International Boundary lines, their branches interlocking with those of the Skagit drainage, and the Methow which flows directly southward into Columbia. The basin occupied by these two streams is enclosed between two spurs of the Cascade range of mountains, which divide in the state of Washington, the true Cascades or Hozameen range forming the divide between the Roche and Skagit rivers and running up northward to the west of the Tulameen river; while the eastern Cascades or Okanagan range strikes slightly east of north and lies to the west of the Pasayton and Ashnola rivers. The western of these two spurs is the more persistent and stronger range, and its summits show little or no diminution in elevation or ruggedness of relief beyond the limits of this sheet to the north. The eastern range, however, from summits at the boundary line with elevations of 8,500 feet, dwindles down north of the Similkameen river to elevations of 7,000 feet.

Taking as a central point the town of Princeton, whose elevation above sea level has been variously estimated at from 1,885 feet to 2,120, and which lies in a shallow depression occupied by Tertiary sedimentary rocks, there is a marked rise in the slope of the lines radiating to the west, south and east, while the gradient to the north is almost imperceptible. In this curve the hills have all been worn down below the limit of intense alpine erosion and appear as rounded ridges and dome-shaped summits of gradually increasing elevation towards the circumference. Only towards the periphery of this curve do the summits attain an elevation greater than the tree line, which in this district is approximately 7,000 feet above sea level, but except in the immediate vicinity of Princeton these are usually well wooded with spruce, pine, balsam and tamarack. This rounded outline and regularity of form, while in the main due to erosion, is also in part the result of the filling in of old irregularities of the surface by the Tertiary lava flows which still cover such a large proportion

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of the surface. Glacial action—both the action of erosion as well as deposition—has also been instrumental in reducing the vertical relief.

Many evidences of recent development in the topography occur. The South Similkameen from the Pasayton to the Whipsaw creek occupies a deep narrow V-shaped valley indicative of a comparatively recent uplift, which imparts to this portion of the stream increased vigor and power of erosion. The valley of the Tulameen also, above Otter creek, as well as many of its tributaries, is very narrow and steep, showing that the drainage has not been very long in operation since the change in elevation.

Numbers of terraces and deposits of gravel also occur at various elevations to a height of 1,100 feet above the present level of the lowest ones. As a rule the higher of these only now occur as small remnants of more extensive terraces, formed in the period immediately following on the disappearance of the Cordilleran glacier, and which have since been reduced in size by the ordinary atmospheric agencies of erosion, or by the action of streams which are now far below them. These are the most apparent evidences of comparatively recent changes of level.

Accompanying the changes of level and either a direct result of them, or of the blocking of ancient channels by recent volcanic flows, have been some striking changes of drainage. The most marked instance of this is the deep wide valley of Wolf creek, now occupied by a stream inconsistent with the size of the valley. It seems probable that this valley, with its continuation through Swelter lake, once carried a great part of the drainage of the Similkameen river which now flows through the Tertiary basin about Princeton. All the smaller streams entering the south side of this valley occupy hanging valleys, so that they debouch in waterfalls, or have been forced to cut deep cañons down to the level of the trunk valley.

GLACIATION.

During the glacial period the Cordilleran glacier covered all the summits north of the boundary line in this belt. The results, however, show that the glacier was losing its great power of erosion and was rather depositing its load. This is evidenced by the small number of grooved and striated rock exposures, and by the thick deposit of rock detritus on the summits of the hills as well as in the valleys. Prospecting for mineral deposits on this account becomes more difficult than in a region where the strength of glacial erosion had been greater. At present no glaciers occur in the belt between the boundary line and Princeton. Many of the highest summits, however, at the boundary line, have beautiful glacial cirques carved out of the solid rock on the sides facing the north. These usually have small lakes in the bottom filled with water drawn from the snow, which lies on the sides and rims of the cirques until well on into the middle of the summer.

Though glacial material is widespread, boulder clay is rarely observed. Terraces of gravel and sand and some beds of clay are frequently found adhering to the sides of the main valleys.

Hanging valleys have already been referred to as occurring on Wolf creek, and also on the Tulameen river above Otter creek.

The thick deposit of glacial drift, though a hindrance to the speedy development of the mineral resources of the district, must be reckoned as a part of its economic

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resources in that it has produced a considerable extent of excellent farm and grazing land, which could be made to support a much larger population than it now holds.

SOLID GEOLOGY.

Geological work on the Similkameen becomes very difficult on account of the great variety and complexity of the rock formations, as also on account of the thickness and widespread covering of drift. Plutonic, volcanic and sedimentary rocks are all present covering a period from Palæozoic to later Tertiary times. Fossils occur in the Tertiary lignite basin about Princeton, and also in the Cretaceous sandstones of the Roche river, but the remaining sedimentary rocks—limestone, agillite and quartzite—are either unfossiliferous or have been so badly crushed as to destroy any remnant of animal life that they ever contained. Contacts between the igneous and sedimentary rocks are rarely exposed, so that it is difficult and very often impossible to establish geological relations. Added to this is the difficulty, in the southern half of the belt, of travelling anywhere except on the trails that have been cut by prospectors through the bush. The latter difficulty, however, does not hold in the northern half where one can usually obtain access to any part whether there is a trail or not. The geological boundaries then, that have been traced, and the ages in which the different rocks have been placed, are tentative and will be subject to revision at a later date.

The formations met with and their approximate or relative ages are as follows:—

GLACIAL AND RECENT DEPOSITS.

Tertiary.—Volcanic flows, basalts, andesites, &c., intrusive sheets and dikes, sandstones, shales, clays and lignite beds.

Cretaceous.—Argillaceous sandstones, grits, conglomerates and slates.

Jurassic or Triassic?—Granodiorite and other batholithic intrusions, porphyrites, tuffs and breccias?

Palæozoic.—Limestones, argillites and quartzites, green, spotted and chloritic schists, talc and graphite schists, mica and hornblende schists, with some limestone and siliceous bands.

The oldest rocks of the district are the Roche river schists, which cover an area about the junction of the Roche and Pasayton rivers. This area extends from the cañon below the junction of the two streams four miles up the Roche river, and to a point eight miles up the Pasayton, its southern contact on the latter stream being the batholithic intrusion of Rimmel granodiorite; while on the Roche river it is in contact with a band of syenite gneiss. On all other sides the schists are overlaid by recent volcanic rocks lying a short distance back from the river banks. The schists are very varied in character. On the south are micaceous and hornblende schists frequently very siliceous and becoming gneissic, and holding some bands of greyish crystalline limestone. The northern part of the area is occupied by soft green, spotted and chloritic schists, with smaller bands of graphitic and talc schists, the latter being frequently mineralized and traversed by quartz-filled fissures. It has been impossible to determine the age of these rocks, and though they have some lithological resemblance to the Archæan of the Shuswap series, they may also be only very highly metamorphosed sedimentaries and porphyrites found in other parts of the district to the north.

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The limestones, quartzite and argillites cover a very limited area, but are important as occurring with some of the ore bodies in the southern part of Copper mountain. They also form a highly altered and metamorphosed band crossing the Similkameen river below Allison, and lying between or under young volcanics on the west, and the great mass of granite on the east. They also extend some distance south of Copper mountain until they are covered by Tertiary volcanics. They appear to resemble closely the Cache Creek series of the Kamloops district. They have been cut and greatly disturbed by later intrusions of igneous rock, and so much of these beds has been destroyed that they now frequently appear only as islands or 'roof pendants' in batholithic masses of rock. The limestone is very often white and crystalline, and the argillites and quartzites are very highly altered, and in many cases have probably taken on a crystalline structure. In addition to the metamorphism they have undergone some fracturing, and become brecciated. Much of these sedimentaries is probably covered by volcanic flows, and much also has been digested and assimilated by eruptive masses of plutonic rocks, and the parts that remain are only remnants of once extensive sediments that covered a great part of southern British Columbia.

A small area of green porphyrites, tuffs and conglomerate occurs in the bottom of the valley of Sunday creek. These are shown in the bed of the stream as cutting through the enclosing parts of the limestones and argillites. They are so intimately associated with volcanic rocks, which are of undoubted Tertiary age, that it is very often difficult to separate the two, and for the present, or until they have been studied in more detail, all that can be said with regard to their age is that they are later than the limestones and older than the Tertiary. The porphyrite is much weathered and decomposed on the surface and appears to be an augite porphyrite. The tuff and conglomerate are greenish in colour and consist of rounded pebbles of earlier volcanic rocks. They also contain some fragments of fossil wood.

Batholithic Intrusions.—Under this head are classed the Rimmel granodiorite of the Pasayton river, the syenite and syenite gneiss of the Roche river, and the igneous complex of the Copper mountain. The Rimmel granodiorite is cut across by the Pasayton river and extends northward from the boundary line for a distance of four miles to its contact with the mica schist. South of it is a large area of Cretaceous rocks. The typical rock of this area is composed of hornblende, biotite, quartz and orthoclase feldspar. On the same strike of the Rimmel granodiorite on the Roche river is a band of syenite and syenite gneiss about two miles wide. This is not so coarsely crystalline and is so much more basic in composition as to be almost a diorite, but it is possible the two may have been produced from the same magma.

The composition of the igneous complex of Copper mountain is very variable, ranging from very siliceous in the north and west to a more basic variety in the south and east. The typical rock is hornblende diorite. This is best developed in the south and east, where it has not been affected by mineralizers or altered by later igneous intrusions. In places where this is in contact with some remnants of the older sedimentaries, a gneissic structure has been induced in it. To the centre and north it has been fractured and brecciated, and is now traversed by many little veins of calcite magnetite and feldspar. The rock has also become finer in grain. Large crystals of biotite are often developed in the zone of fracture. The contact between the diorite and the sedimentaries is very irregular whenever it is exposed. It is rarely sharply defined

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and in many cases no definite boundary can be assigned to the igneous rock. It occurs under so many different types of dikes, with which it becomes intimately mixed, that it is often difficult in the field to separate the different intrusions.

Lower Cretaceous.—These rocks cover a wide area in the southwest corner of the district. They appear on the Pasayton river just north of the boundary line and striking about 330° , cross the Roche river about six miles above the junction of that stream with the Pasayton. At both these places they are seen to overlies the eruptive rocks. The beds consist of hard sandstones and grits, interbedded with black and red argillaceous slates, all of which appear to have suffered much stress and pressure, for the angles of dip are now all high, being usually about 50° . On the Roche river the bottom bed is a conglomerate, which rests directly on the syenite to the north of it.

Tertiary.—The remaining rocks are all of Tertiary age; and, grouping the sedimentary rocks with the volcanic, we find that they cover the largest proportion of the district. The sedimentary rocks alone in the northern part of the district cover an area of nearly fifty square miles—the basin being fourteen miles long with a variable width of from three to five and a half miles. These sedimentary rocks consist of thick beds of sandstone, with clay, shales and several seams of coal. The base of the series appears to be a very coarse-grained sandstone containing many large rounded white feldspars in a matrix of calcareous material. This rests, on the eastern side of the basin, on the Copper Mountain series of rocks; while on nearly all other boundaries, the sediments dip under the more recent volcanic rocks, which lie as sheets on them. In parts, also, these volcanics have thrust themselves through the sediments and now appear as islands in the older rocks. The strata do not now lie horizontally, but have been tilted at low angles, making an irregular series of folds. Some faults also occur.

Many drill holes have been bored in this Tertiary basin in search of coal seams, and with some good results. Most of them, however, were put down at or near the edge of the seam and only one near the western edge of the basin. By the kindness of Mr. Ernest Waterman, manager of the Vermilion Forks Mining and Development Company, copies of the records of these drills have been obtained. These have disclosed the thickest coal seams to be in the vicinity of the town of Princeton, where a bed over eighteen feet in thickness was struck at a depth of forty-nine feet below the surface. The hole, in which this seam was found, was sunk near the bridge over the Similkameen river to a depth of 280 feet. In this hole coal seams aggregating thirty-five feet seven inches were crossed in the first ninety feet, while the rest was in shales and sandstones. Four miles up the Similkameen river a bore hole sunk to a depth of 257 feet only went through two feet five inches of coal; while a drill hole near the south end of the basin at Ashnola, which penetrated to a depth of 398 feet, gave no workable seam at all, and only a few bands of what is called in the record 'coaly shale.'

A bore hole was also drilled near the western edge of the basin, where the sediments dip under the volcanics, and not far from where there is an outcrop of coal four feet thick. The depth of the hole is 863 feet, and in that distance seventeen seams of coal were cut through with an aggregate thickness of fifty and a half feet, of which the thickest seam was nine feet.

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From a study of these records it would appear that most, though not all, of the workable seams are within 300 feet of the surface. It must be noted, however, that no prospecting by drilling has been done north of the Similkameen river, and the basin undoubtedly extends as far north at least as the forks of Onemile creek.

Coal outcrops in many places both on the Similkameen and Tulameen rivers, also on Summers creek, Bromley creek and Ninemile. At the latter place a cut in the bank made by the stream discloses a bed fifteen feet in thickness of fairly clean coal, with five thin partings of clay, all resting on white clay.

A sample from the big seam at Princeton worked by the Vermilion Forks Mining Company was sent to Mr. Hoffmann of the Department. He calls it a lignite, but one of the better class. Analysis by fast coking gave:

Hygroscopic water....	16.17
Volatile combustible matter....	37.58
Fixed carbon.....	41.67
Ash....	4.58
	100.00
Coke per cent....	46.25

Character of coke, pulverulent: colour of ash, brownish-yellow.

Though the age of these beds is put down as the same as the Coldwater group of the Nicola valley in which coal occurs, there is a difference in the quality of the fuel contained in each. The Nicola coal is considerably higher in fixed carbon and lower in water, but the amount of ash is also higher. Some of the beds of the Princeton coal basin are only in a primary stage of formation, and they still show the brown woody fibre of the slightly altered vegetable remains. Some also have been completely destroyed by combustion, and it is to the combustion of an underlying bed of lignite that Dr. Dawson attributed the metamorphism and colour of the rocks at the Vermilion bluffs.

The volcanic rocks of Tertiary age have a wide distribution, and prove that this part of the country was the scene of tremendous volcanic activity during that period. Their area must have been considerably diminished during the Glacial period, so that the present distribution cannot be taken as indicative of their original extent. These are the youngest rocks in the district, for they are seen in the Tulameen river and also one Onemile creek and Summers creeks to rest on the rocks of the coal series. On the Tulameen river the stream cuts through beds of clay and sandstone overlaid by these volcanics for a distance of at least two and one-half miles. The schists of the Roche river are overlaid to the north and east by these volcanics, and they also overlies the Copper Mountain series on the north and west. They consist of rhyolites and trachytes, andesites, basalt, tuffs and breccias. The darker lavas are often amygdaloidal, the vesicles being filled with chert, chalcedony or zeolites. Some agates and wood opal were found in the volcanic area east of Coldwater creek.

Some of the dikes cutting the Copper Mountain rocks appear to be contemporaneous with these volcanic rocks, and in some way connected with them.

ORE DEPOSITS.

In the Roche River district the mineralized area is confined to a belt of soft talc, chloritic and hornblendic schists, lying about the junction of the Roche with the Pasayton river. The ore bodies are of two classes; (1) Small gold bearing fissure veins; (2) Larger bedded veins, copper bearing. The first are usually quartz veins from three inches to four feet in width, cutting across the strike of the schists, and dipping at angles from 60° to 90° . They carry besides gold, bornite, tetrahedrite, chalcopyrite and pyrite. Sylvanite was also reported to occur, but an assay of a selected sample of one of the veins supposed to carry this mineral gave no trace of tellurium.

The second class contains larger ore bodies, lying parallel to the strike of the schists. These may be either quartz veins or mineralized bands in the schists. These carry some gold, and the copper and iron sulphides; the highest values are in copper.

Only two claims have been Crown-granted and surveyed, and the amount of development work done on all of them is not sufficient to prove the ore bodies, or test their permanence. The surveyed claims are the Pasayton and the Sailor Jack. On both these are small fissures; on the Pasayton a fissure four inches wide, from which the samples were taken to test for tellurides; and on the Sailor Jack a fissure two feet wide cutting across a hornblende schist.

The greatest amount of work has been done on the Red Star and Anaconda claims. On these there is a belt of soft talc and chloritic schist about 400 feet wide, striking 125° dipping vertically, and lying between mica-schists. It appears to be traversed by a fault plane, along which bunches and lenses of white feldspar and quartz have been found, and which were first worked for their gold content. On development the vein ran into the talc schist, which proved to be highly mineralized with copper carbonates and cuprite, and which was farther on replaced by bornite and chalcopyrite. Along with these were pyrite and arsenopyrite, siderite and some blende. A shaft has been sunk in the tunnel to a depth of sixty feet, but this had to be abandoned on account of the gases. Some native copper occurs as sheets in little slips and fault planes in the schist.

Several other claims have been staked in this district, and though there are some indications of high grade ore occurring, the only work done on them has been just sufficient to enable the Copper Mountain owners to hold their claim.

Copper Mountain was reported on by Mr. W. F. Robertson, the Provincial Mineralogist, in August, 1901, and his report appears in the Annual Report of the Minister of Mines for British Columbia of that year. Since then development work has been extended farther to the eastward, but little more has been done in the neighbourhood of the river. In speaking of Copper Mountain camp and Copper Mountain ore bodies, it will be distinctly understood that Kennedy mountain will be included as well, for no distinction can be drawn between the two.

The camp includes about 130 Crown-granted mineral claims, covering an area five miles long from east to west, and about four miles from north to south. Combination camp lies to the south of Copper mountain, but the ore bodies are much the same in character.

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The country rock is a batholithic intrusion of igneous rock of very variable composition, which has been intruded into and has almost entirely digested the older underlying sediments—limestones, argillites and quartzites—so that these only now appear as inclusions or remnants in the igneous rock. To the north and west it is overlaid by recent volcanic rocks. Along the southern and eastern border of the mineralized area the igneous rock is a diorite, which sometimes has a gneissic structure, and which frequently holds segregations of the dark minerals. To the north this rock becomes more acid, and is cut by narrow veins of pink feldspar and quartz. Both the sediments and the igneous rock are intimately mixed with, and cut by later dikes of different ages, whose sequence cannot yet be perfectly worked out. These dikes have a general north and south trend and are quartz porphyry, rhyolite, andesite, felsite and diabase, of which the first mentioned are apparently the most recent. The whole series, except the later dikes, is traversed by a set of fracture and fault planes running in an almost east and west direction.

Two classes of ore bodies have been made out—(1) those occurring at or near the contact of the sediments with an igneous rock; and (2) those occurring in the zones of fracture. Both are of a very indefinite character without well defined boundaries. Examples of the first class are found at the southern end of Copper mountain, and on the west side of the Similkameen river. In this class ore bodies are frequently found at the contact of the diorite with a limestone, which may be very much altered. The ore here generally occurs as infiltrations in the small fracture planes with which the rock is traversed. The fissures cut both the igneous as well as the sedimentary rocks, and the metallic sulphides are found in both, but only in the neighbourhood of the contact. The fissures have been filled with secondary calcite which acts as the gangue of the sulphides. Rhyolite and quartz porphyry dikes cut both kinds of rock, and have apparently been injected after the fracturing and fissuring had ceased, for they are not themselves affected by any such dynamic action. The intruded rock alone has been fissured to allow of the flow of mineralized solutions. These dikes are not in themselves mineralized, and do not appear to have had anything to do with the formation of the ore bodies. In the Jennie Silkman claim a highly mineralized diabase dike, which cuts an altered sedimentary rock along with a quartz porphyry, seems to be responsible for the formation of the ore. The minerals occurring in this class are chalcopyrite, pyrite, bornite and calcite with a little magnetite. Bornite is confined to the southern portion of the camp. The Sunset, Helen H. Gardner, Jennie Silkman and Copper Farm claims are examples of this class.

The second class of ore bodies occurs in the centre of Copper mountain and eastward across Wolf creek. In this case the ore occupies a zone of fracturing, which strikes about N. 75° E. It often happens that the country rock has been brecciated and the fragments cemented together by calcite, or it is traversed by a network of small calcite veins with a N. 75° E. trend. These fissures are most abundant about the middle of the mineralized area, and die out to the north and south. They sometimes attain a width of two feet, but are more often only an inch or two. They cut all the rocks except some of the later dikes. These dikes strike at right angles to the course of the fissures, cutting off the ore bodies, and they do not seem to have been affected by any strains or stresses, except those which are consequent on the cooling

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of an igneous body. Pyrite, chalcopyrite, mispickel and magnetite occur in the calcite veins. Magnetite sometimes replaces the calcite altogether in the veins and forms the gangue for the other minerals. The Triangle Fraction, Red Eagle, Ada B. Frisco and other claims running east and west across the middle of the camp are examples of this class. In the northern part of the district the little fissures are filled with feldspar, quartz, or magnetite, to the entire exclusion of calcite.

Besides being concentrated in the zones of fracture, the copper and iron sulphides appear often to be original constituents of the country rock, for they appear as idiomorphic crystals disseminated through it without any connection with each other; and until a great deal more work is done on the claims it will be difficult to give a correct history of the formation of the ore bodies. At present not many claims have been explored to a depth lower than the limit of surface oxidation, but it may be possible to throw more light on the origin of the ore bodies, when the numerous samples obtained have been thoroughly examined under the microscope.

Owing to the nature of the occurrence of the ore on Copper mountain it is a difficult matter to make estimates of the average values that the rock would give on assay. The ore bodies have no definite boundaries, in fact the whole mountain is more or less mineralized, with concentration taking place along certain lines, and what is classed as ore to-day may be too low grade to give a profit to-morrow, depending altogether on the price of copper and the cost of mining. The boundaries then will be merely commercial ones. Mr. W. F. Robertson made assays of samples from many of the different claims in 1901, and the results he obtained were from $1\frac{1}{2}$ to 3 per cent in copper of average samples, with selected samples going up to 8 per cent. Most of them carried a small amount in gold. It will be seen by this that these ore bodies are very low grade, but this is compensated for by their great size, and the ease with which they can be worked.

In the country lying between Onemile and Fivemile creeks, and on the slope of Fivemile creek, several claims have been located, but only the western portion of this area came within the area examined. The United Empire group, consisting of nine claims, is on Allison mountain, and occurs in the same series of metamorphosed sediments as on Kennedy mountain. The whole hill is heavily covered with wash and the rock wherever exposed is decomposed to a much greater extent than in any other part of the country, due perhaps to a covering of volcanic flows during the glacial period, which prevented the decomposed rock from being removed by the scouring action of the glacier. At the base of the hill is a thick deposit of clay and detritus washed down from the hill: it is heavily charged with copper carbonate which has probably been derived from the leaching out of a quartz vein higher up the hill carrying the sulphides of copper. Evidence in support of this is obtained from a shaft forty feet deep sunk about half way up the hill, at the bottom of which blocks of quartz carrying chalcopyrite occur in the decomposed rock.

It is probable that there is a vein of quartz carrying copper sulphides at this place, but not enough work has been done to demonstrate the size of the vein or its strike. Surface indications, however, point to its having an east and west strike across the strike of the fracture planes on Copper mountain.

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BEAR CREEK.

At the end of the season a hurried reconnaissance was made of a mineralized belt of rocks running from the Tulameen river at Champion creek northward past the head of Bear creek to the Coldwater river. Some very promising mining properties are being exploited in this region, and this belt of rock well warrants a more extended study next year.

Briefly stated, the geological conditions are as follows: Stretching across in a northerly direction from the mouth of Champion creek to the head of the Coldwater is a belt of light coloured granite. In contact with this on the east side is a series of metamorphosed sediments, limestone, quartzite and schists, extending from the Coldwater river to the Fish lakes. From the Fish lakes to the forks of Eagle creek the granite is in contact with a dike-like mass of peridotite a mile to two miles wide, which then strikes southeasterly at a sharp angle with the strike of the granite. In this angle between the granite and the peridotite is another small area of quartzite, limestone and mica schist, which extends south to the Tulameen river and terminates at Champion creek. Bordering the peridotite and schists on the east is a large body of pyroxenite, which extends from the falls on Bear creek, where the waggon road crosses it, southward across the Tulameen river, where it comes in contact with graphite. The pyroxenite is succeeded on the east by enormous masses of volcanic rocks, which have undergone considerable metamorphism, and are earlier in age than these volcanic rocks previously referred to in this report as occurring on the Similkameen river. Dikes of diabase, quartz-porphry, granite-porphry and rhyolite cut all the other rocks, and consequently are later in origin.

Contacts between the granite and schists, between the granite and peridotite, and between the schists and peridotite and pyroxenite, were discovered and studied in the field, and from these the geological relations were worked out. The schists which are probably metamorphosed limestones and quartzites are the oldest rocks in the district, for they are cut by all the others and are found as inclusions in the granite and in the peridotite. Next in age comes the peridotite, and with this must be included the pyroxenite, though the latter is slightly the younger, for on Eagle creek dikes of pyroxenite were found cutting the peridotite. Prof. J. F. Kemp, who examined the district in 1900, reports the same conditions on the south side of the Tulameen. The next rock in sequence is the large batholithic mass of granite lying to the west. Contacts between this and the older rocks are well shown on the Tulameen river and on Eagle creek. Following the granite intrusion are the sheared and metamorphosed volcanic flows, and later again are the dikes which have penetrated all the preceding rocks.

Mineral claims have been located all along this granite contact, from Champion creek across to the Coldwater river, and for many years the placers of the Tulameen river and its tributaries below Champion creek have been profitably worked for gold and platinum. These placers are being gradually exhausted, and the Tulameen river from being the principal producer of platinum on the North American continent, now supplies an annual output of thirty or forty ounces of that metal. Mining activity, however, is now being revived and the production from lode mining will probably soon be far greater than it ever was in the best days of the placer miner.

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Most of the mineral claims have been located in the area of schists, limestones and quartzites, and some in the peridotite and pyroxenite belt. The metals for which they have been staked are gold, silver and copper; and the minerals occurring are pyrrhotite, pyrite, galena, chalcopyrite and calcite, with some zinc blende and molybdenite.

Molybdenite is found in several places along the granite contact. At Independent camp at the head of the Coldwater river it occurs in fine scales in the large porphyry dike, and at Champion creek it is found in little quartz stringers cutting the schists at and near the contact with the granite.

Among the most promising claims in the district are the St. Lawrence group, owned by the Similkameen Mining and Smelting Company, of Vancouver. These were first located in the fall of 1900 by a party of Swedes, and are situated on the western side of Bear creek, and on the contact of the granite with the schists and limestones. The schists are mica schists, and they enclose narrow bands of white crystalline limestone. They dip at about 65° towards the granite, and are cut by some large and highly mineralized dikes of granite porphyry, which have a north and south trend approximately parallel to the trend of the granite. The ore is always found associated with the limestone, and frequently replaces the lime bands entirely. The granite porphyry dikes appear to be the source of the ore. The limestone bands, being the most soluble rocks, have acted as channels for mineralized solutions emanating from the dikes, and they have become at times entirely replaced by sulphides. These solutions ascending from below, and following the lime bands have deposited their sulphides against the mica schists, which always act as a hanging wall to the vein. Two veins have been opened up on this group, each of them from seven to eight feet wide, and the ore in them appears to be almost pure pyrrhotite. The values are high in copper, gold and silver, and altogether the property has the ear marks of a permanent producing mine.

Another important group of claims is the Independent group owned by Messrs. Johnson, Holmes & Henning, and situated on the summit of the divide between Bear creek and the Coldwater river. This group is also on the contact of the granite body with mica schists. Here the ore body is a highly mineralized zone of rock extending from the edge of the schists about 1,000 feet westward into the granite. Two thousand feet away from the schists the granite becomes gneissic, though still holding inclusions of the mica schists. No sharp line of contact could be discovered between the ore body and the unaltered granite, only that the mineralization by sulphides appears to gradually decrease until at 1,200 feet away from the schist it disappears. The ore body is highly altered and kaolinized, where mineralization is greatest, and it appears to be of the nature of a dike of granite porphyry intruded between the schists and the granite, though it is possible it may only be a mineralization and alteration of the same granite at and near the contact with the schists. Inclusions of mica schist occur in the unaltered granite as well as in the ore body. The greatest alteration is about the centre of the mineralized zone, where a small vein of pure iron and copper sulphides cuts the porphyry at an angle of 45 degrees. The feldspar here is kaolinized, though the quartz is unaltered, and some secondary calcite has been developed. Mineralization throughout the body of the porphyry is usually by individual crystals of iron and copper pyrites, more rarely by veins and bunches of these minerals. Only in the highly altered zone does oxidation extend to a depth of twenty feet from the surface.

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Some molybdenite occurs in thin seams and flakes near the contact with the mica schist. The values are entirely in copper, and are low, but the ore body is an enormous one. The group consists of ten claims, which have all been staked on the same contact, running down into the Coldwater river.

Numerous other claims were visited in this section of country, among them being the Keruna group on Bear creek, and the Boulder Creek camp east of Bear creek. The former lies in the same series of altered sedimentary rocks as were described on the St. Lawrence group. These are cut by dikes of a porphyritic character which strike about 330° . The ore occurs as little veins and bunches in the sediments at and near the contact of the dikes. The minerals found are pyrite, chalcopyrite and pyrrhotite, and the values are in gold and silver.

At Boulder creek the claims are located in a soft green serpentine, which often has a schistose structure developed in it, and which appears to be an altered volcanic rock. The ore bodies are in blanket veins interbedded with the country rock, and the minerals occurring are pyrite, chalcopyrite and some galena. The values are in gold, or copper, or both, the one increasing as the other decreases.

Owing to the enormous rise in the price of platinum in the last year, and to the fact that the basin of the Tulameen river once produced a larger amount of platinum than any other part of North America, it is altogether probable that attempts will again be made by interested parties in the near future to locate the source of the metal in this district, or to work some of the higher bench deposits of gravel which are known to carry platinum, but which formerly necessitated too large an outlay of capital to work. Prof. J. F. Kemp spent about three months of the summer of 1900 in investigating the geology of the platinum, and though he was not successful to the extent of finding any large bodies of rock which could be profitably mined for platinum, he was able to throw a great deal of light on the origin and occurrence of the metal. His results are embodied in Bulletin 193, of the United States Geological Survey.

The Tulameen section of the country presents a great many more difficulties to the prospector than the Similkameen country. The former is very heavily timbered, and trails are few and rough. Rock exposures, however, are more common, except where the country is underlaid by the schists and limestones, as in the upper parts of Bear creek. Here the growth of timber is heavier than usual, and the country is so heavily covered with drift that rock exposures very rarely occur, and it has only been by much labour that ore bodies have been located. It is here though that conditions for the formation of ore bodies are so favourable that other important discoveries are to be expected.

In conclusion, my acknowledgments are due to many of the prospectors in the country for their courtesy and readiness to assist, and particularly to Mr. C. F. Law for a history of mining and prospecting in the region and for much other useful information.

ON OPERATIONS IN THE ROSSLAND, B.C. MINING DISTRICT.

R. W. Brock.

The past field season was spent in the Rossland mining camp continuing the survey of the camp begun last season, described in the preliminary report on the Rossland, B.C. mining district. The division of the work made last year was adhered to during the present summer, viz.: W. H. Boyd took charge of the topographical survey; G. A. Young mapped the areal geology, while the writer's attention was given to the veins and ore deposits.

Six student assistants were attached to the party, Messrs. L. L. Bolton, J. M. Sands, S. J. Schofield, A. Boyd, R. E. Fisher, and H. Pedley, all of whom advanced the operations by willing and intelligent services.

The instructions were to complete, if possible, the work in the Rossland district. Mr. Young succeeded in completing his task. Mr. Boyd finished his map of the area embracing the town and working mines, on a scale of 400 feet to the inch, with 20 foot contours, and the main portion of the map of Rossland and vicinity on a scale of 1,200 feet with contours at 40 foot intervals. He was forced to suspend operations for the season, with two or three weeks' work still uncompleted. This, however, can be finished next spring without delaying the publication of the map. My own work will require the same time to complete.

Operations were commenced early in May and suspended the middle of October. In August the writer spent a fortnight accompanying Mr. Low through the Slocan and Boundary districts and on a hasty visit to Franklin camp, on the North Fork of the Kettle river. The geological work was not confined strictly to the areas covered by the map sheets of Rossland but was extended in various directions, in the hope that some of the problems might be more easily solvable outside than within the complicated area in the immediate vicinity of Rossland, and in order to compare the outlying veins with those of the camp itself. With few exceptions all the workings that could be found, and that were sufficiently free of water to be entered, were examined, as well as a number of mineral claims lying outside.

It is probable that the Survey accomplishes most, from a practical standpoint, by furnishing directly to those entitled to it, any information gained regarding a property. Such information, while it may be of value to the individual or company, may not possess any general interest and may therefore not be utilized in a report. While the direct benefit resulting from a survey of a mining camp may lie largely in what may be accomplished in this manner, it is usually of such a nature that the results cannot be made apparent to the public and are, on this account, likely to be overlooked. Where possible, such information was given to those interested on the spot. Where this was not done it may be furnished, if applied for by owners of a property examined.

Nothing was found to greatly alter the conception of the geological history of the camp given in the 'Preliminary Report on the Rossland, B.C., Mining district' and it need not be repeated in this place. One of the most interesting and unex-

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pected discoveries was that of a bed of fossiliferous stratified rock just above the O. K. mine. While considerably altered to calcite it is hoped that some of the fossils collected preserve enough of their original forms to enable the exact geological age of the rocks to be determined.

Exact figures of production cannot be obtained. As nearly as they can be computed Rossland has produced to Jan. 1st, 1906, 2,247,295 tons of ore containing 1,240,331 oz. of gold, 1,723,249 oz. of silver and 60,753,330 lbs. of copper valued at about \$34,879,239.00. This year's production will be seriously affected by the slackening of shipments by the Centre Star while alterations were in progress, which occupied almost half the year, and by a shortage of coke at the smelters occasioned by the strike of coal miners at Fernie. From this cause the LeRoi Company, which had intended to operate its Northport smelter, in addition to shipping to Trail, was obliged to postpone the blowing in of the Northport furnaces.

During the past year, development work in the mines has been pushed more vigorously than formerly with the gratifying result that more ore is now in sight in each of the mines than has been for a good many years.

In the LeRoi work has been largely, but not altogether, confined to the South lode opening up large ore bodies on a number of levels, from the 300 down. Hitherto the workings on the LeRoi had been confined to the ground east of the Josie gulch from about the Josie shaft to the LeRoi stores. Levels are now being extended on the LeRoi west of this dike and good ore has been encountered. This opens up considerable possibilities in extensive but hitherto untested ground. The winze from the 1350 level has been extended to the 1750. On the 1650, the last developed level, the main drives are almost altogether in heavy sulphides. These lower levels will be extended and worked when the shaft has been sunk to them, which work is now in progress. The North and Main lodes are also receiving some attention.

In ground so extensively mineralized as the LeRoi the whole of a lode from end to end and from side to side is worth prospecting; a narrow drift along it, a narrow stope on it, or a very occasional crosscut or drill hole by no means exhausts the possibilities. On the South lode there are large areas as yet totally unprospected and on the Main vein there is a great deal that has not been wholly tested transversely. This with the ground west of the Josie dike and the deep levels gives a large extent of territory with first-rate possibilities.

The geological work in the LeRoi showed a very large number of the ore shoots to occur along the contact between the augite porphyry and the tongue of granitoid rock which lies between the Main and South lodes. A dike of quartz-bearing porphyry occurs in or near the latter lode on a number of levels of the LeRoi and also on the South lode of the Centre Star. It might sometimes be useful as an indicator.

The Consolidated Mining and Smelting Company of Canada in addition to work on the upper levels has devoted a good deal of attention to the deep levels of the Centre Star and War Eagle. The shaft of the former has been continued from the tenth to the twelfth levels. It is encouraging to note that the eleventh level, the deepest developed level in the mine, promises to prove better than any level since the fifty. One sill floor had been cut out to a width of forty-eight feet, in pay ore. On the War Eagle,

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besides prospecting on the upper levels where some new shoots have been located, work on the newly found downward continuation of the War Eagle vein has been in progress in the ninth, tenth and eleventh levels. Three crosscuts from the War Eagle to the Central Star shaft have been run to enable the two mines to be operated from the Centre Star shaft.

A new 1,100 Nordberg hoist, with a capacity of 1,350 tons per ten hours from 3,000 feet is being installed, and in the new hoist house, a sorting and sampling plant will be placed. The compressors from the War Eagle are being placed with the Centre Star and all will be electrically driven, so that hereafter the two mines will be one with one headworks and shaft.

The Iron Mask mine, lying north of the Centre Star and in the obtuse angle between it and the War Eagle, has been acquired by the Consolidated Mining and Smelting Company and preparations are being made to operate it through the War Eagle.

On the LeRoi No. 2 the most interesting and important development has been the exploration of the Hamilton vein on the 500 foot level. This vein has been followed continuously for a distance of over 1200 feet, most of which, it is said, will be extracted, and much of it is good grade ore. Near the surface this promising vein is far below grade and even to the 300 foot level it is not up to the mark but below this the values come in. This mine is the only one with extensive workings west of the Josie dike, but from it a large quantity of ore has been extracted. The Poorman vein on the Josie claim is also being operated.

The Jumbo mine, after operating several years and after shipping about 30,000 tons, has shut down, having extracted the known ore.

The Crown Point was operated for a few weeks and shipped a little ore but as the ore gave out a short distance below the surface, work was suspended.

The White Bear on the other hand is again in operation, principally on development work, although ore extracted in this work is being shipped.

There is some prospect of several other properties being reopened.

Outside what may be termed the Central area, that occupied by and adjoining the working mines, there are a large number of veins. In some of them a little high grade ore has been obtained but the majority are low grade or have shown so far as developed only small amounts of good grade material.

In the stratified rocks, while some veins have good surface showing, they have failed to maintain their strength and values downwards and the numerous slips in these rocks make it difficult to follow them.

Two main types of veins occur outside the Central area, which, however, may grade into one another, those that consist largely of pyrrhotite with small amounts of pyrite, chalcopyrite and other sulphides and those that have as conspicuous constituents some of the minerals arsenopyrite, pyrite, molybdenite, galena, blende, bismuthinite, garnet epidote and quartz. These obtain both to the north and west and in the south belt. West of Little Sheep creek quartz veins with some sulphides are common.

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The O. K. and I. X. L. furnished very rich gold quartz ore from a vein in serpentine but the vein does not reach the lowest level.

The attempt made to map the veins of the camp was not very successful. Veins are too numerous, too much alike, exposures are too frequent, and small faults too plentiful to enable one to interpolate between outcrops. It was decided that it would be more useful to simply mark the exposures with a line sufficiently long to indicate the strike of the vein at that point, except where there can be no doubt as to the identity of the vein. The map will suggest the co-relation of the exposures, and anyone interested may test the verity of his conclusions by trenching. Plotting the outcrops, however, as well as the development work in the mines emphasises the fact that there is a large number of veins, and that they are more persistent than had been expected. This is true also of the ore shoots to a much greater extent than was formerly supposed.

It is evident from early workings that two mistakes of an opposite character were liable to be made; either too great regularity was expected or none at all. Either of these mistakes was fatal. There is enough regularity to make it safe to conclude that when a well marked typical vein disappears, it has been faulted, and when an ore shoot fails to appear at the expected spot, a change of dip or a horizontal heave is sufficiently probable to make a thorough search advisable. In early work prospecting was often stopped by a fault of the dike, or if continued the drive was frequently turned along the fault plane, the worst possible place to look for information.

Almost all the veins strike either nearly east and west or northwest and southeast so that when only a limited exposure is to be seen it may fairly be presumed that the vein strikes it in one of these directions.

It is a noticeable fact that with few exceptions all the claims which have attracted attention in the south belt as well as in the north, lie very close to the contact of the monzonite or gabbro mass. Ground near this contact would therefore appear to be particularly favourable for prospecting.

Starting with the South lode of the LeRoi-Centre Star, there are at least seven veins that are producing ore—and possibly more. From the War Eagle to the Cliff there are four well marked ones.

Unfortunately there are few rock exposures south of the south lode, but the monzonite contact lies somewhere south of it. Since the conditions southward seem as favourable as northward of the South lode, it is scarcely likely that the great ore bodies of this lode have so much ore to the north of them and none to the south. It is less unlikely to suppose the LeRoi-Centre Star Main and South lodes are the central and perhaps the most important members of a co-ordinate system of veins. That there is some mineralization in this ground is shown by the Nickel Plate workings, cuttings on the Red Mountain railway, and by the Spitzee veins. The sheared and mineralized rock of a lode would weather and erode more rapidly than unmineralized country rock and might very well be covered with wash in a gulch. The heavy mantle of wash that covers most of the ground has prevented prospecting, so that as yet it is mostly virgin territory. Its prospecting will be costly, but adjoining as it does ground of such proved richness, and possessing so far as may be presaged, favourable

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geological conditions, the chances for success are sufficiently strong to render its exploitation a good business venture. The most favourable point to test it would be in the neighbourhood of the Josie dike.

The work of the LeRoi No. 2 west of the Josie dike proves mineralization to have extended a long distance in this direction. That on the LeRoi proves that the veins east of the dike may be expected to continue west of it. From about the boundary between the White Bear and Black Bear, the contact between the ore-bearing and the stratified rocks extends northward, all west of this being stratified rocks. The workings of the White Bear show the thickness of these rocks to be 500 feet and that they overlie ore-bearing rocks. There is reason to believe that elsewhere along their eastern border their thickness does not exceed a few hundred feet and that they overlie augite-porphyrite concealed by the mantling stratified rocks; in time other companies besides the White Bear may explore these underlying rocks.

Excepting on the St. Elmo Cliff vein, little has been done on the veins mentioned north of the White Eagle No. 1, outside of a few prospect shafts. Nothing has been produced and only a few good assays are reported, but it may at least be said that the surface showings are as good as they are on the Hamilton vein of the LeRoi No. 2 which is developing as well as on the 500 level.

Some good ore has been taken from the Consolidated St. Elmo, Cliff, Monte Christo, Evening Star, and from C. and K. The main lodes of the Centre Star are mostly drift covered east of the Centre Star gulch, and have not been prospected except by a shaft on the Enterprise which is in heavy sulphides. Between this and the Monte Christo vein are several veins with massive pyrrhotite but little chalcopyrite showing.

The south belt has several veins. The Homestake, Gopher, Lee, Celtic Queen and perhaps the Crown Point appear to be on one continuous lead. Some of these south belt claims had good surface showing, yielding high return, but development work does not seem to have opened up good ore shoots that have continued downwards. Recent work on the Crown Point revealed the disappointing fact that its strong ore body suddenly gave out about twenty feet below the surface, the transition between ore and unmineralized rock occurring in a space of less than two feet. Few of the workings on the south belt could be entered, and most of it is concealed by wash, so that little can be said of its possibilities. Since the covering of wash which makes prospecting difficult might conceal some good ore, it is unfortunate that the work already done on this belt should offer so little encouragement to prospecting.

While there is ground about Rossland that is well worth prospecting, this does not mean that such ground is worth a high cash price. For the testing of it is very costly and may bring in no return for the money invested. The owner should be willing either to take a small cash payment or if he has so much confidence in his claims, to give a bond on it for a guarantee that the work will be done.

The temperature of the rocks at various levels in some of the mines was taken to determine the increase with depth. Chemical thermometers were fitted with wooden handles four feet long with openings to permit reading and to

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leave the bulbs free. The measurements were taken in drill holes in crosscuts where there could be a minimum circulation of air. The thermometer was immersed the length of the handle in the hole, and at first the mouth of the hole was plugged, but it was found that no difference in readings resulted when the holes were left open. The readings for similar levels below the surface agreed remarkably well. From the surface to 150 or 200 feet the temperatures regularly decreased to 41.75 F. From here the temperature rises rapidly for a few hundred feet, then more slowly, and for the last few hundred feet more rapidly again. The highest temperature—in the 1,750 level of the LeRoy—is 17.6 F. The rate of increase from the lowest temperature to the highest is 1° per 47.7 feet. The lowest increase—between the fourth and tenth levels of the Centre Star—is 1° every 53.7 feet, and the highest rate of increase between the tenth and eleventh levels of the Centre Star, 1° every thirty-four feet. That the temperature should decrease for such an unusual distance below the surface may perhaps be due to the chilling of the rocks by the Cordilleran glacier. If this is so the increment of increase shown below the cold zone will also be affected and be lower than it should be. As it is, the increase 1° in at most fifty feet is higher than that observed in most regions. The average given by the Commissioner of the British Association in 1889 is 1° for every sixty-four feet and this appears high in the light of subsequent observations. In Grass valley, California, it is 1° in 122 feet, in the Rand 1° in 208, in Michigan, 1° in 223.7. In the Simplon tunnel, 1° in ninety feet, varying from 1° in 210 feet under mountains to 1° in sixty feet in valleys. The high rate of increase in Rossland may perhaps indicate comparatively recent hydrothermal activity—or even comparatively recent volcanism.

Dikes at different levels show the effects of heated waters being bleached in much the same way as rocks by the solfotarie action of volcanoes. But the present mine waters have a lower temperature than the rocks except in the cold zone near the surface. On the intermediate levels, water entering from fractures or diamond drill holes may be 5° F. lower than the rock temperature. On the 11th level of the Centre Star about 1,300 feet below the surface the water is only 1° lower. This is the lowest level on which mine water could be examined. While lower in temperature than the rock, its unusually high content in mineral matter, particularly in the chlorides, and carbonates of alkalis and alkaline earths and in silica, would lead one to expect it had come from a region of higher temperature. There is some evidence of the action of this water on the vein on this level with an unusual development of copper ore at certain places.

An area of serpentine occurs on Little Sheep creek on both sides of the valley in the vicinity of the O. K. mine. In some places veinlets of asbestos are developed. The quality is excellent but the veins are too narrow and small to be of any economic interest. With the view of testing this rock for platinum, samples were taken, pulverized and concentrated by panning. In this way a fairly large amount of rock could be tested. The creek bed was also washed at favourable points between Silica and the O. K. mine. Two small nuggets were found which resembled platinum. Others should be found in the concentrates that have not yet been treated. The sample of the Creek concentrates assayed by Mr. Connor of this Survey yielded nothing but a little gold (\$37.00 per ton). Concerning the assay of serpentine concentrates, Mr. Connor reports:—“0083 ounces gold per ton, 0.0025 ounces platinum (?) per ton. My reason for

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the question mark after platinum is that the amount is so small that I had no chemical proof of its being platinum. On the other hand the gold and platinum (?) had a greyish or brownish tint instead of the gold colour, and were somewhat brittle. Also on alloying this gold and platinum residue with silver and dissolving again in nitric acid (for solution of the platinum), the residue gold was much more natural in colour and softness and weighed less, as expected. From this loss of weight I have given the figure for platinum.'

A few miles north of Rossland, between Murphy and Sullivan creeks, on the Lord Roberts claim, is a large deposit of magnetite interesting as representing the Boundary Creek type of contact deposit in the immediate vicinity of Rossland. The country rock could not be seen but it must be close to the contact between the Nelson granodiorites and the 'Rossland volcanic group' augite-porphyrity with stratified rocks including limestone. The deposit has been disclosed by a few open cuts for several hundred feet. Its width must be more than thirty feet. The upper trench shows a fine grained micaceous syenite porphyry along the hanging wall. Bluish massive magnetite with a little chalcopyrite distributed through it as in the Boundary, pyrite, pyrrhotite, hornblende, epidote garnet, feldspar and quartz were detected. A small pegmatite dike was also seen in the ore. The hornblende is soft and black like that found in the Josie and Black Bear shoot of the LeRoi. Magnetite and pyrite are most abundant near the footwall and pyrrhotite and chalcopyrite near the hanging wall but specimens may be obtained showing all four iron-bearing minerals, sometimes arranged in bands.

Specimens and descriptions furnished by prospectors indicate that other deposits of a similar nature are found in the neighbourhood of Rossland, particularly in altered limestone, at the head of Murphy creek and in Big Sheep basin.

FRANKLIN CAMP.

Franklin camp is situated on the east branch of the North Fork of the Kettle river about forty-three miles by road from Grand Forks. At present it can be reached by stage from the railway at Grand Forks in a day. Hotel accommodation and supplies are to be had in the camp.

Recently the camp has attracted some attention as a result of the development work now in progress, and the promise of a railway now under construction from Grand Forks.

A reconnaissance survey of this part of the country was made by the writer and W. W. Leach of this Survey in 1900 and the topographical features and salient points in the geology are shown on the West Kootenay map sheets, issued some time ago.

In the day's visit to the camp this summer nothing could be done toward correcting the outlines of the geological formations as given on the map. When the survey was made the country was timbered and the position of the geological boundaries had usually to be assumed. Since then fires have swept over the camp and the rocks and ledges are much better exposed.

The geology of the camp is somewhat complex. The oldest series of rocks represented consists of limestone usually much metamorphosed to crystalline limestone, to green lime silicate hornfels, to a baked-like siliceous rock, highly fractured, and

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to breccia or conglomerate-like rocks, some with limestone surrounded by green silicate and some with green silicate-nodules in a limestone ground mass; of argillites and of greenstone. The altered limestone is much more extensive than represented on the map. A large area consists of grey Nelson granodiorite which is intrusive in the basal rocks. Both these formations are intruded by a gabbro-like rock and a porphyritic syenite with long coarse reddish feldspar crystals. All the above rocks are cut by a light acid granite ('Valhalla granite') towards the west fork divide and by pink alkali syenite ('Rossland alkali syenite') to the east. Numerous dikes from these intrusives cut the older formations. Overlying the older formations like a mantle are Tertiary rocks which now occur in isolated patches but which formerly extended as a continuous capping. These rocks consist of a quartzite-like rock, gritty tuffs with coarse conglomerate bands, and conglomerate beds with interspersed ash rocks. Overlying these again are lava-flows consisting of andesites and trachytes and agglomerates formed from them, basalts and ash beds.

The conglomerates hold boulders, from one-half inch to two feet in diameter, of the older rocks, particularly grey granodiorite, limestone, greenstone, and an older fine grained conglomerate. The conglomerate appears to cover a greater area than represented on the map, reaching in places to the north fork bottom. It is cut by dikes of the alkali syenite and by dikes from the volcanic rocks. The lavas have in places a basaltic jointing. Some beds are rich in gas pores in which calcite, agate and zeolites are developed. The abundant intrusive rocks have profoundly altered the older rocks and ore deposits are developed in the latter.

The deposits consist of several types: (1) Iron and copper sulphides in a gangue of altered country-rock, *i.e.*, green lime silicates, as garnet, epidote, hornblende, quartz, calcite.

(2) Magnetite deposits, with some copper and iron sulphides, and the same gangue minerals.

(3) Galena-blende and chalcopyrite, with only a slight amount of the green silicates.

(4) Quartz veins, with galena-blende, pyrite and chalcopyrite, molybdenite, arsenopyrite, etc.

(5) Chalcopyrite in fractures and replacing minerals of the granodiorite or porphyritic syenite.

Both in the nature of its ore deposits and in its geology this district bears a strong resemblance to the Boundary Creek district. The rocks are very similar and the contact metamorphism, forming lime silicates and magnetic-chalcopyrite deposits is the same. In Franklin, of course, it has yet to be proved that mineralization was on the same gigantic scale as in the Boundary, and that the ores have the minerals in the same proportion to make them so amenable to smelting.

The most exclusively developed claim is the McKinley, which has had about \$30,000 expended on it in surface improvements, tunnelling, trenching and diamond drilling. Four leads have been discovered in a band of limestone running north toward Franklin mountain. Development has scarcely determined the strike of the leads, but

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they appear to run transversely across the limestone band. Along the ledges the limestone is altered to green silicates, epidote, hornblende, garnet, &c. The lowest ledge yet uncovered has a large development of magnetite, with some iron and copper sulphides.

The second ledge outcrops for a width of about thirty feet, but the dip is at a low angle southwest. It contains a large amount of galena and blende as well as chalcopryite, the silicates are only sparsely developed, unaltered limestone being in direct contact with galena. It is said to yield high grade ore, with good values in silver. The upper and best developed ledge has iron and copper pyrites as the chief metallic minerals, and a considerable amount of the gangue minerals. It is supposed to be about forty feet wide, dipping about 45° south, and has been followed 300 feet. From a point 213 feet in the tunnel the fourth ledge is cut for a distance of fifteen feet. This seems rich in copper. The gold values are low, probably on an average lower than in the Boundary ores, but the copper is expected to run a good deal higher.

The same company that is developing the McKinley is testing the Banner claim on Franklin mountain, by diamond drilling, etc. This claim was not visited this season. At the time of the first examination there was a strong, very wide lead of quartz, carrying galena, blende and chalcopryite.

The Maple Leaf claim on Franklin mountain has ledges along the contact of the reddish syenite, with the altered basal rocks. The mineralization is chiefly confined to the syenite. Fractures are filled with seams of chalcopryite and pyrite, or with green malachite resulting from the alteration of its copper ore, and the constituents of the syenite are selectively replaced by the sulphides. The coloured constituents are the first to suffer, leaving the conspicuous feldspar crystals in a sulphide base, but often the whole rock is replaced by the ore. At several points along the contact, which is drift covered, wide stretches of such mineralized rocks have been uncovered, and in the syenites, a few hundred feet back from the contact, a vein four feet wide of fairly well mineralized rock has been opened.

The Gloucester group, now being worked under bond by the Dominion Copper Company, was not visited. On the G. H. claim of this group is a ledge of magnetite, with a little pyrite and chalcopryite. In places it is at least forty feet wide, and it has been traced several hundred feet. It seemed to lie wholly in the grey granodiorite. On the Gloucester was a good showing of copper ore, with pyrite, molybdenite, calcite, and quartz, with grey granodiorite on one side at least, but the country-rock is badly altered.

A number of copper lodes occur in the grey granodiorite on Tenderloin mountain, where the rock is crushed, sometimes to a sort of 'ball' structure, round which the granite material wraps. In these crushed zones, particularly along fracture planes, the mineralization is quite heavy.

In addition to those mentioned there are a large number of claims on which discoveries have been made.

Deposits had been found in the older rocks of the camp—the altered basal rocks—greenstone and altered limestones, granodiorite, gabbro, porphyritic syenite. Lodes similar to the McKinley are likely to be found in the continuation of the limestone

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band and in other limestone areas in the camp. But deposits are unlikely to be found in the acid granite ('Valhalla granite' of the map), the pink alkali syenite ('Rossland alkali syenite' of the map), or in the capping of Tertiary lavas.

The work done in the camp is limited, and near the surface, so that it has yet to be demonstrated what values the deposits will carry at depth, and for the low grade deposits that they can furnish a large tonnage of pay grade ore. So far the results on the McKinley seem to be encouraging.

Since none of the claims are past the prospect stage, and none of the workings have attained depth, it cannot be definitely stated that another mining camp has been added to the British Columbia list. But the camp has many of the earmarks of a mineral bearing district. Additional discoveries are extremely probable and there seems to be a reasonable prospect that some of the properties may develop into mines.

ROCKY MOUNTAIN COAL AREAS,

BETWEEN THE BOW AND YELLOWHEAD PASSES.

By D. B. Dowling.

The completed maps of the Cascade coal area, and a small map of part of the Costigan area on the Panther river, give, with some detail, the topographic features of all the coal areas north as far as the watershed between the Panther and Red Deer rivers. The work undertaken for the present season was to survey and map by the photo-topographic method a portion of the northward continuation of the Cascade and other coal basins, and also to explore the country to the north in search of other areas, in the hope that workable coal seams of the better class of coal might be found nearer the proposed route of the railways through the Yellowhead pass. To carry out this programme it was necessary to divide the party and leave Mr. Malloch to carry on the triangulation while I went north.

Rejoining the party later I found that Mr. Malloch had made satisfactory progress with his work, and I remained with him for a week to help in laying out the work for the summer.

In going north to the Saskatchewan we followed the rocks of the Cascade coal basin to within fourteen miles of that stream where they are finally denuded away in the valley of Rabbit creek. Reaching the Saskatchewan near the middle of July it was found that the river was at its flood, and we therefore chose it for our journey in search of the coal formation.

On the 1st of August we crossed the river and made our way towards the headwaters of the Brazeau by ascending White Goat river which enters the Saskatchewan below Sentinel mountain, a peak overlooking the 'Kootanie Plain.' From the head of this stream over the Cataract pass we reached the headwaters of the Brazeau and followed it down to the foothills. Turning south behind the Bighorn range we traversed a high plateau of Cretaceous rocks intersected by several streams that also cut through the limestone range to the east, and at the southern slope following a stream that enters the Saskatchewan just above where it passes the end of the Bighorn range.

On our way southward the mountain ridges were again crossed on Sheep river, where the coal measures were seen in two basins within the mountains, and again in an upturn in the foothills to the east of the first range. From here we made our way south to the Clearwater and entering the mountains on this stream we crossed to the Red Deer on a different trail from that followed in the spring. Here we met Mr. Malloch's party and the season's work was concluded after necessary observations from several triangulation stations had been taken. The return to Morley was made just as the weather seemed about breaking up. We reached Morley September 20.

The season was particularly favourable as fine weather and clear atmosphere are necessary to triangulation observations and photography.

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WASHING CANMORE COAL.

The output of the mines at Canmore is taken by the C.P.R., and used almost exclusively on the British Columbia section where the heavy grades necessitate the employment of the best coal available. In later years there has been found in the fine coal a large percentage of ash which formed clinkers on the grate bars and these were a source of annoyance to the engineers. Washing the coal and more careful picking was recommended in the Summary Report of this Survey for 1904, p. 113. This led to the installation of a washing plant and the visit I paid at this time was to learn the result of the first trials. An underestimate of the amount of fine coal produced was made in planning the capacity of the plant so that the drying bins were too small. The washing is confined to the material that passes the half inch screen. This is then stored for a couple of days in the drying bins and then delivered along with the freshly mined lump to the railway cars. Owing to the large percentage of fine coal produced, only about half of it is washed, as the storing capacity is small. In a short time additional bins will be added.

The result obtained by washing half the fine coal and picking the lump is that about twelve per cent of the 'run of mine' is removed as rock and the character of the coal has been thus considerably raised. The opinions of the railway engineers were conflicting as to the improvement in the coal, so, on the invitation of Mr. A. Stewart, I visited Field, where 100 tons per day are being used on the heavy grade at the 'Big Hill.' Here the cause of the varying opinions was evident. The increased traffic from the west was responsible for the allotted supply of fresh coal being quickly used up and the unlucky engineers who could not get it were drawing from the old store which had been exposed in the open for as long as six years, and it was undoubtedly dirty and poorly picked. The freshly washed coal was considered satisfactory. And, as before remarked, when the extra drying bins are added and the whole of the slack is washed, the coal should rank with the best in America for steaming purposes.

PHOTOGRAPHIC SURVEY.

The area included in the triangulation accomplished during the summer, and for which it is expected the photographs will supply enough topographic detail to map on the one mile scale, extends from the Panther river northwest to the Clearwater, and from the Vermilion range northeastward to near the outer range. This area is roughly from twenty to twenty-five miles in length and about sixteen miles in width, making an area from 320 to 400 square miles. This work was accomplished by Mr. G. S. Malloch with one assistant, and he will this winter plot the work thus far done. A section of the Cascade coal measures he also carefully measured at a favourable point about half way between Red Deer and Clearwater rivers, clearing away enough of the surface to expose all the coal seams at this point.

GENERAL DESCRIPTION.

The structure of the Rocky mountains, as has been pointed out, consists of a series of long fault blocks tilted up along the eastern edge, but there are two fault lines that may be considered as indicating faults of much greater magnitude than the others. These two are respectively the break in front of the outer range and that in front

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of the Sawback range. The first break brings up Devonian limestones above the Cretaceous of the foothills, with the summits of most of the ranges behind repetitions of Carboniferous beds. At the Sawback the rocks are of a different series and are much older than in the ranges in front. Cambrian quartzites and shales are found pushed up over the top of the Carboniferous. This change in the age of the beds is noticeable to the ordinary traveller in the different colour of the slopes. Westward yellowish coloured rocks predominate, but eastward the limestones are bluish white.

The front ranges are fairly continuous, but the amount of horizontal displacement is not so uniform, so that the interval between varies greatly in width. As the upper members of the sections of these fault blocks are found on the west side of the valleys, it is quite evident that in the narrower intervals the higher members may be wanting. This is generally the reason that coal-bearing areas which consist of the Cretaceous beds just above the limestone are not always continuous strips between the ranges. In other cases the whole block becomes so elevated that, even if there were originally coal-bearing rocks on top, the natural wearing down of the surface would affect them to a much greater extent than when not so elevated.

Fractures across each block provide lines of weakness for the inauguration of the breaking away of these barriers so that the drainage of the area might be more direct instead of, as at first, following the trend of the ridges. All the cross valleys are probably along these breaks. Many of them seem to cross several ridges and are generally in the direction of the pressure and consequent movement. The breaks sometimes show slight differences in elevation and alignment of the rocks on either side, but generally they are of small amount and may be spoken of as pressure slips. These are not all at right angles to the general trend of the ridges as frequently there seems to have been two breaks at some of the gaps—often intersecting. The denudation of the loosened material leaves in that case a turn in the course through the ridge, and often a low mountain occupying the centre of the gap with the main streams on one side and a branch on the other. Examples of this feature are seen on Panther river in the gap through two ridges and on Sheep river as it leaves the vicinity of the Cascade coal basin. The general direction, however, of most of the streams through the outer ranges, is in a fairly direct line, and would lead to the supposition that the slips often occur piercing more than one fault block.

Panther River.—This stream, after emerging from the mountains, joins the Red Deer river. The outer range here shows a decided bend in its general course which is confined to a short distance only on each side. The break through this is nearly at right angles to the strike which deflects the stream to an east and west course. Inside through the succeeding ranges the course is more nearly at right angles to the general trend of the main ranges. The interval between the mountain ranges is here wide, and three areas of the Cretaceous coal-bearing rocks are left in situ.

Red Deer River.—This stream occupies a valley which in a general way follows the rule of crossing the ranges along what seems a cross-fracture, but just before reaching the outer range it is deflected to the south and crosses the outer range diagonally instead of going through the gap which is on a prolongation of its upper course. The James river, which rises on this gap, would thus appear to have been, in the early history of this surface after the mountains had been raised up, the original channel,

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but a deflection is evident later on down a line of syncline and fault through the range, that was probably more easily eroded. The outer range south of Panther river is very near the second, but they separate widely to north of the Red Deer, and in this basin there is a large block of the Cretaceous rocks which overlie the limestone. Near the Clearwater the beds are dipping slightly to the southwest, but the upper members of the limestone series are there at so great an elevation that the Cretaceous rocks are found only on the tops of some of the hills. The valley of the Red Deer, which is cut through these measures down to the limestone, divides the coal areas into two parts. That to the south is in a compact mass elevated toward the north, and the northern portion, in more or less isolated areas.

The course of the stream through the succeeding ranges is in a general straight line, but the Cretaceous rocks do not appear to cross, except those of the continuation of the Cascade basin, which are overridden by rocks of the Vermilion range.

Clearwater River.—The valley by which this stream is led through the ranges starts near the Pipestone pass and not far from the source of Siffleur river which runs north to the Saskatchewan. At the crossing of the Vermilion ranges the Cretaceous is still in evidence, but the coal-bearing beds are raised above the level of the stream. Eastwards the rocks are all of the limestone series and the valley penetrates them deeply. The continuation of the valley out through the foothills has been abandoned, and the present stream is deflected to the northward about three miles. The interval between this stream and the Sheep river is occupied by high masses of flat-lying limestones upturned along the eastern margin in the outer range, and interrupted along the centre by an overfold or broken syncline. This elevated portion forms an interruption to the continuity of the coalfields east of Cascade basin. These do not terminate here, however, as there is again a depression between the ridges northward, and coal areas again occur.

Sheep River.—This stream crosses the ranges in a more irregular course than the other streams already mentioned, and seems to have followed no distinct line of fracture or slip. It rises in the Sawback range in two streams, which unite after crossing the Cascade basin. Between the outer ranges two areas of coal-bearing rocks occur, but form rather shallow basins separated by a fault of relatively small throw, as it brings up only the top of the Carboniferous. At the gap leading to the foothills the river has taken a sharp turn northward along the strike of the limestones before cutting through the range. The outer fault next to the foothills is there, an overthrust with an anticline in front of it, which brings the top of the Carboniferous limestone against the Devonian of the lower slope of the first range. This anticlinal fold is pressed to the east so that the down turning beds are nearly vertical. The Kootanie series, the coal-bearing beds of the mountains, are there exposed just outside the mountains, but are steeply inclined to the northeast and much crumpled and broken. Higher beds succeed them, but in a short distance the general westerly dip prevails and a series of small faults parallel to the mountain range repeats the same series of beds for a considerable distance from the mountains. These appear to be shales and thin-bedded sandstones of the Benton formation.

Saskatchewan River.—The upper part of this stream was examined by Mr.

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McConnell some time since, and the rocks are described as being mainly of the Bow River and Castle Mountain series.

From the mouth of Rabbit creek the stream follows a lateral valley, a continuation of that of Rabbit creek. It then turns across the ranges and follows a general direct course, which at the extremity of Bighorn range is evidently along a line of break, both a fault and a slight slip. All the ranges crossed by Sheep river are here compressed to a series that occupies a width of only six miles. The greatest deflection to form this narrow ridge takes place in the outer range and the coal area which is seen on Sheep river ends high up in the hills six miles south of the Saskatchewan. The centre about which this outer range for a short distance may be said to curve is the south end of an outer line of mountains, the Bighorn range, which starts at the Saskatchewan and runs parallel to the mountains as far as the Brazeau. The valley from the mouth of Rabbit creek to the foothills is comparatively wide, and the elevation at the river is less than 5,000 feet, so that this is a favourable winter camp for Indians, as the open patches provide good feed for their ponies. The old name on Palliser's map of 1858, 'Kootanie Plain,' evidently points to the occupation of the valley by hunting parties of Indians from southern British Columbia.

White Goat River.—This stream heads in the lofty range that is on the east of the north branch of the Saskatchewan. The numerous glaciers of this elevated region maintain several large streams which unite to form this river. The largest branch, Cataract creek, comes from the northwest between two ridges and is fed by four glaciers perched along the face of the western ridge. The summit of this branch is low enough for a pack trail, and the headwaters of Brazeau river are reached from this divide.

West of Sentinel Mountain range the Sawback fault brings up rocks that are probably Cambrian, and the ascent of the stream is across an ascending series of beds, which in the divide to the Saskatchewan headwaters are capped by the limestone of the Castle Mountain series. The beds dip to the southwest, but with lessening amount as the headwaters are reached, and appear to form a shallow syncline east of the north branch of the Saskatchewan. Mount Coleman is at the head of this valley, and is a broad, lofty peak. Heavy limestone beds occupy the summit, showing steep walled faces apparently all around, but in the lower part thin bedded rocks have easier slopes.

Brazeau River.—The south branch of the main stream rises in the same range as the White Goat river, but a great part of the water comes from the mountains between this stream and the Athabaska. Brazeau lake lies in a large valley on the north side, which is about on the line of the great Sawback fault. The mountains on the northeast are of Carboniferous limestone, dipping southwest, with patches of the Permo-Triassic quartzites resting against them, but in several places these are covered by yellow quartzites of the lower part of the Bow River series, the line of fault being near the eastern edge of the lake. Glaciers at the head of this valley supply a large part of the water issuing from the lake, and this is probably greater than that of the stream so far followed.

From the vicinity of the lake the valley down to Job creek is directly across mountain ridges made of inclined blocks of the Carboniferous rocks, with occasionally

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some Devonian showing on the east and reddish beds above the Carboniferous on the west. At the mouth of Job creek the stream turns to the left along the strike of the beds for five miles, and then again resumes its general course, emerging from the mountains in a wide valley which continues in a north-northeast course to the end of a strong ridge of foothills, which in a short distance southward rise to mountain heights—the northern end of the Bighorn range.

Before turning the flank of this range the stream is joined by a branch issuing from a gap a few miles north of the main valley. The latter stream was reached by Mr. McEvoy on his journey up Rocky creek from the Athabaska, and the mountain between the two rivers is no doubt Mount Dalhousie, named by the Earl of Southesk.

COAL AREAS.

Extension of Cascade Basin.—This area is the most persistent of the coal areas, and continues north to within fourteen miles of the Saskatchewan river. In the section between the two branches of the Red Deer river there is a fold in the measures which runs out before reaching the Red Deer, or was in the past eroded away, so that the seams now seen are in the block which is overridden by Prow mountain. Northward between Red Deer and Clearwater rivers there is a minor fold which disturbs these seams, but they still appear to go under the limestone. Northward the distance between the ranges narrows, and it is evident that most of the measures are turned up again at the fault line before the headwaters of Sheep river are reached. This is seen plainly on a branch of Rabbit creek, which comes through the western range and whose valley is eroded to the bottom of the coal measures; this area, therefore, loses its value as a coal field before its northern limit is reached.

Midway between Red Deer and Clearwater rivers Mr. Malloch measured a section of the coal-bearing beds, and found in a thickness of 1,420 feet, mainly sandstones and brown shales, twenty-four seams with a total of 114 feet of coal. Some of these were less than four feet in thickness, and are probably not workable, but fifteen of the larger ones range from four and a half to eleven feet, and have a workable thickness of coal which amounts to about ninety-five feet.

Palliser Basin.—To the east of the Cascade area a triangular block, which is partially shown on the map of the Cascade basin, runs north to near the Red Deer river, but in the northern portions there is published no statement as to its coal seams. Last summer Mr. Malloch was in this field and noted six seams or beds which appear to be fairly free from folds dipping to the southwest. This portion may prove of value as a small field. In the elevated region northward the rocks below the coal measures are exposed along this trough to near Sheep river, where elevated areas of coal measures are again seen and continue a short distance north, but it is probable that they will long remain untouched as they are not easily reached.

Costigan Basin.—The southern portion of this was reported on in the Summary Report for 1904. This basin between Red Deer and Clearwater rivers is broken up into isolated patches, but southward it is more compact and the measures form a high plateau bordering the valley of the Red Deer. No exposures of Cretaceous occur in the Clearwater valley and probably there are none until near Sheep river, but this

northern portion is not wide and may not be of immediate importance, although it extends to within a short distance of the Saskatchewan.

Bighorn Basin.—Another range starting at the Saskatchewan and containing the general line of the front of the mountains, but not a continuation of the front range to the south, runs northward to the Brazeau river. This is the result of a local fault and the western side is shoved up over some of the rocks on the northeast. This uplift tilts up the beds of the foothills and exposes the lower beds down through the coal measures. Behind the Bighorn range there is thus brought to the surface the same coal bearing rocks as are found in the mountain basins, and another coal field is available which extends northward to past Brazeau river. In this all the beds of the Kootanie formation are exposed, as the interval between the mountains is wide, and rocks as high as Middle Cretaceous are seen along the western margin.

The beginning of this field south of the Saskatchewan occupies but a small triangle opposite Bighorn range. The top beds only are exposed, but a few coal seams were found. The upper two are only about two feet each in thickness; another of three feet lies six feet above a five foot seam and these two could be worked together as the coal appears to be of good character. A sample from the five foot seam analysed by Mr. M. F. Connor gave:—

Moisture....	1·85
Volatile combustible matter...	24·95
Fixed carbon....	69·70
Ash..	3·50
	100·00

The small upper seams are slightly softer but are here too small. Across on the north side of the Saskatchewan the whole set of measures are raised much higher and all the formation can be got at either on the western slopes of the range or in the gorge of Bighorn creek, a tributary from the west behind Bighorn range. The tops of the measures are exposed at the falls and many seams can be seen in this cañon. The lower ones appear here to be generally very dirty and many of the black coal-like streaks are found to be only black shale. The best exposure of coal was found in a valley cutting through Bighorn range just south of Brazeau river. This does not show as great a deposit of river-borne material as the valley of the Brazeau and the coal measures which also cross the latter are more easily exposed.

The only natural exposure here was of the upper seam and the sandstone rib above it. Its thickness is small and not sufficient to pay to work and in this respect resembles the coal on the Saskatchewan. The coal also is slightly softer, as are the others here.

In prospecting for the lower seams one of over seven feet was found occupying about the position of the five and three foot seams of the Saskatchewan but there they are very dirty. Fifty feet or more beneath this a heavy sandstone rib forms a good roof for a seam that had a favourable appearance; when this was cleared its thickness was found to be sixteen feet with one foot of shale in the centre, leaving a thickness of good coal fifteen feet. Half a mile south in another gully what was taken as the same seam had no shale parting and we uncovered from the floor twelve feet of very clean coal without reaching the roof which outcropped above.

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These two occurrences, even if on the same seam, show that there is here a large body of coal in a workable position having a dip of about 30 degrees to the southwest.

Samples from the first exposure of the sixteen foot seam, taken from both the top and bottom portions, gave the following analysis:—

Moisture....	2.50
Volatile combustible matter....	27.10
Fixed carbon....	64.00
Ash....	6.40
	100.00
Fuel ratio.—Volatile to fixed carbon....	2.36

This is a good steam coal and probably of the best grade for coke. The fuel ratio places it at about the grade of Blairmore and Frank coal, though it seems to have less ash.

SURFACE GEOLOGY OF THE GREAT PLAINS AND BRITISH COLUMBIA, ETC.

R. Chalmers.

Your instructions to me in regard to the field work of the season just closed were to study the surface geology of the prairies, especially in the provinces of Saskatchewan and Alberta, along the lines of the Canadian Northern and Grand Trunk Pacific railways, and if time and expenditure permitted to spend a few weeks in British Columbia. The proposed investigations were to embrace, in as large a measure as possible, subjects of an economic character, and such materials as clays, sands, shales, &c., suitable for the manufacture of the different kinds of brick, pottery, &c., were to receive special attention. The water supply of a number of the towns and villages on the plains has been causing some anxiety, and the conditions affecting it were also to be made the subject of inquiry.

I left Ottawa on the 23rd of May, proceeding directly to Winnipeg, and thence to Dauphin where some days were occupied in examining Riding and Duck mountains, and a number of other places in the vicinity. Along the Canadian Northern railway the country is, for the most part, a plain covered by the black loam, described on a following page, while rolling surfaces are found at the foot of the mountains. Following the railway westward, traverses were made across the plains in a number of places and the upper Assiniboine valley was explored. The black clay, already referred to, continues to form the uppermost stratum as far west as the rolling sand hills beyond Humboldt. At the South Saskatchewan valley there is one of the finest farming tracts on the plains. From Prince Albert the northern branch of the Canadian Northern railway was followed to Melfort, Swan River and Dauphin. Excellent land was seen along a portion of this route, especially in the Carrot River valley, and at Swan river. On the north side of the Porcupine hills there is a well-wooded district, which in places grows spruce, larch and hachmatack large enough for merchantable timber. Great quantities are treated by the small saw-mills erected along this part of the railway. Arriving at Neepawa, a trip was taken thence to Minnedosa and Yorkton. Good farms and a number of thriving towns were observed along this route. Returning from Yorkton to Minnedosa a trip was made across the country to Estevan where two days were spent. The coal and brick works at Estevan were visited, as well as those at Roches Percee and Pinto siding. Clays were found to be abundant everywhere, but whether adapted for making fire brick has not yet been ascertained. At Moosejaw Mr. W. White manufactures common brick and a limited quantity of fire brick from clay obtained at hills near Wood mountain. This clay he hauls to Moosejaw in winter. The output of fire-clay could be greatly increased and a ready sale obtained if the clay could be obtained at a less cost.

Returning from Moosejaw to Saskatoon the surface beds in the valley of the South Saskatchewan were examined in some detail. In a cutting of the new branch of the

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Canadian Pacific railway north of South Saskatchewan river the following series in descending order was noted:—

(1) Ordinary surface loam, sand and gravel.

(2) Fine-grained, stratified sand and silt, in some places in horizontal position, in others in wavy, curving beds, having in some parts apparently been deposited in moving waters of variable velocity.

(3) The decomposed rock surface beneath.

No boulder-clay was seen in this cutting nor in one along the Grand Trunk railway near by.

At and near Prince Albert, on the North Saskatchewan, boulders of Archæan rocks seem to be scarcer than in some places farther south, but a number were observed in the river bed and along its banks.

Terminal moraines of small dimensions were noted to the northeast of North Battleford, three or four miles from the Saskatchewan river. They evidently belong to the latest ice period, for stratified sands and gravels occur beneath them. The wide valley of the Saskatchewan here for four or five miles, has been almost wholly eroded in the surface beds since the ice period referred to. The prairie is at the same level on both sides of the river. Terraces occur at high levels; some quite distinct at 300 feet above the river and others at less altitudes.

At the Canadian Northern Railway bridge crossing the Saskatchewan above Battleford, boulder-clay is exposed in cuttings on both sides of the river, showing that the ancient valley here, at all events, was partly filled with it. This part of the Saskatchewan valley has, therefore, been inter- or pre-glacial.

At Lloydminster settlement there is another of these wide shallow basins with a black clay or gumbo soil, so common on the first and second prairie steppes.

Between this and Edmonton there is a good deal of bush country and stumps of poplar, willow, &c., with open spaces between. In the valley of the Saskatchewan there are flats of varying width with a rich black soil. This is the character of the country to Edmonton and beyond it.

Edmonton stands on the north bank of the Saskatchewan river in a fine agricultural region extending to the north, east and west. The ever-recurring black vegetable soil covers the surface to variable depths, and poplar and willow groves are a prevailing feature. At Strathcona on the south side of the river similar features characterize the plain.

The Saskatchewan valley here contains thick beds of clay suitable for the manufacture of brick, tiles, pressed brick, &c. Fire bricks have also been produced by Messrs. P. Anderson & Co., from certain clays near their works in East Strathcona. With this brick Mr. Anderson has lined his furnace and informs me that it has stood the test for four years.

The Great Plains.—The plains or prairies of the Canadian Northwest are really the upper or northern extension of the great valleys of the Mississippi and Missouri rivers into Canada. As has been shown by the late Dr. G. M. Dawson* these plains rise gradually from east to west in the form of steppes, being 800 or 900 feet above sea-

* The Geology and Resources of the Forty-ninth Parallel, pp. 3-6.

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level at or near Winnipeg, while at the foot of the Rocky mountains they are 4,000 feet or more. This ascent is not regular, however, each steppe having certain features peculiar to itself. Elevations called mountains occur in a number of places. The steppes are best seen along the main line of the Canadian Pacific railway. Though these prairies may be called plains, the term can hardly be applied strictly to the features of the second and third steppes, which in many localities have a rolling aspect and numerous inequalities of the surface.

The materials constituting the surface deposits of this great prairie region are of different kinds, as is shown by the following general section of the beds in descending order:—

1. A dark or blackish, tough clay, containing some sand and silt, but nevertheless forming, when wet, a soft tenaceous mass, very sticky and coherent. In dry weather it bakes and becomes almost as hard as a brick. In the western United States this deposit is usually called 'gumbo,' and the name is gradually being adopted in Manitoba and the new provinces.

The thickness of this deposit is variable; sometimes it is only a few inches, while in local areas it is eight to ten feet or more. It occurs in all the hollows of the first and second steppes and occasionally on the higher grounds, though on the latter in a comparatively thin sheet and in flat, wet areas. The more elevated grounds and the ridges and hills are generally devoid of it. So far as it has been studied it seems to be a vegetable formation, which in the lower grounds grew in shallow lakes, ponds and swamps, accumulating *in situ* for ages. Dead and decayed water-and-marsh plants, together with peat and other vegetation growing in moist places, seem to make up the bulk of this deposit. The intermixed fine sand and silt have probably been carried into the swamps and ponds by rains, wind, &c., from the higher and drier grounds surrounding them. The occurrence of this black soil on the higher level tracts indicates that these were also marsh and swamp lands at one time. The wide horizontal areas covered by this formation shows that it must have been formed in water that was very shallow. On the first and second prairie steppes it does not seem that this black soil could have any other but a lacustrine origin, but on the third steppe in Alberta it is possibly of sub-aerial growth in some places, unless the levels of the country have changed very considerably since its deposition or growth. In the latter district it must be admitted that the areas occupied by this black soil are not in all places in the horizontal attitude in which they usually occur in Manitoba, where it is so wide-spread. This fact and its thickness in the province last-mentioned would indicate that it was a region of shallow lakes, marshes and bogs for a long time. This black soil is the formation which makes the plains so fertile.

2. Beneath the black loam just described, a grey clay of variable thickness occurs almost everywhere on the plains. From this clay considerable quantities of common brick are manufactured. It seldom exceeds a thickness of four or five feet, and generally contains more or less sand, and frequently, a few pebbles.

3. Below this lies a harder clay, somewhat similar to No. 2, but with compact, rusty strata, often called 'hardpan.' These harder strata sometimes alternate with

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clays of a pebbly or coarse texture. In the Red River valley this member of the series has been found forty feet thick or more. Westward it becomes thinner, or rather is often replaced by other beds.

This series of deposits with the local variation observed in it may be found over most of the plains. In many places, sand, gravel and silts, often of considerable thickness, are intercalated, while in river valleys fluviatile deposits are found to contain clays suitable for the manufacture of bricks, tiles, &c. In descending order, generally speaking, these fluviatile beds consist of (1) clay; (2) gravel and sand, or sometimes silts; (3) sand, ten to twelve feet, and a harder clay beneath—thickness unknown. This may be partly boulder clay.

An interesting section of the surface beds was seen in the bank of the Canadian Pacific irrigation canal along the Bow river, about four miles below Calgary. These, in descending order are as follows: (1) Sand and gravel, from a few inches to a foot or more; (2) eight to ten feet of stratified clay; (3) boulder-clay twelve to fifteen feet; contains numerous boulders of all sizes up to two feet in diameter, but only one or two small ones that might be called Laurentian. In this boulder clay there occurs a lenticular seam of stratified gravel and sand, two or three feet thick, which was seen to thin out to an edge in one direction and disappear, and apparently did so in the other. This resembles the intercalated stratified gravels and sands observed in the Scottish boulder-clays, and described by Prof. J. Geikie in the 'Great Ice Age.' (4) Decomposed sandstones.

At Medicine Hat there is a good section of the surface beds at the brick yard of Messrs. Purmal Bros. These appear in the face of the bank or cut to be 150 feet thick, while the rock surface is said to be fifty feet lower. It appeared to me, however, that the lower part of the section is merely the weathered edges of the Cretaceous rocks of the district.

GLACIATION, BOULDER-CLAY AND BOULDERS.

Though boulders from the Archaean and other rocks lying to the north of the plains occur scattered over them in trails and patches up to within fifty or 100 miles of the Rocky mountains, yet the quantities of boulder-clay found upon these plains are limited and sporadic. Both boulders and boulder-clay usually occur in belts which range generally north and south, or northeast and southwest, though occasionally these belts, or moraines as they are sometimes called, have an east and west trend. At all events, they do not seem to have been laid down regularly or in continuous beds upon the surface of the region. Whether this is really the result of the original mode of deposition, however, or is due to subsequent denudation remains to be determined. A feature of the boulder-clay may be noted, namely, that it is often found massed against the north or northeast sides of the hills, while the central part of the mountain is generally occupied with deposits of stratified materials, and wherever any contact of the two is seen the latter is found beneath the boulder-clay. This fact, along with others referred to later, tends to support the view that these mountains are really remnants of a former surface of the plains which stood as high then as their present summits now do.

Owing to the irregular occurrence of the boulder-clay its position in the series is difficult if not impossible to determine; in other words, it cannot be stated with

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certainly whether a deposit of boulder-clay is upper or lower. The evidence, therefore, as to two or more boulder-clays on the plains is, after all, rather uncertain.

Ice striæ are rarely seen on the plains, but near their northern limits the older rocks are abundantly scored. The principal evidence we have, therefore, regarding ice movements across the prairie region, is that of the transport of boulders and boulder-clay itself, and these, as far as observed, only show such movements along certain lines.

Drainage features.—The drainage features of the plains are most interesting. The Saskatchewan river, with its numerous tributaries, is evidently the oldest of these and is one of the most important physical features of the country. The erosion and trenching of the Rocky mountains, and the distribution of the materials composing the surface deposits of the higher parts of the prairie are largely the work of this river. These materials, on the third or highest prairie steppe, have been derived almost directly from the mountains. The loose silty and arenaceous character of much of the materials, however, renders them exceedingly mobile, or easily moved from higher to lower levels. Rivers and brooks, rains, winds, frost and snow denude, and cause them to be thus readily moved, and their transport eastward from higher to lower levels and the consequent reduction of large portions of the plains to a comparatively uniform surface seems to be largely due to this cause. There are, however, a number of features connected with the denudation and levelling of the plains which lend countenance to the hypothesis of a fluvial and lacustrine stage preceding the present. The existence of old river valleys and lake basins now empty of water, or nearly so, the former high level of many of the lakes and of portions of the prairies, as shown by old shore lines and flat-topped eminences called mountains, support this view.

BRITISH COLUMBIA.

The surface deposits of British Columbia are somewhat different from those of the great plains. The black clay or vegetable deposit is not often seen there, the materials consisting largely of gravels, sands, silts and clay. The heavier precipitation and the extensive denudation which the western slope of the Cordillera has undergone carried away much of the eroded material. Except in the river flats, which are comparatively narrow until we approach the Pacific coast, the level surfaces are few and limited. The valley of the Fraser river, however, exhibits some fine terraces and meadows in its lower reaches, and where these are overflowed by spring floods periodically there is a black loamy soil. These remarks apply more particularly to the mainland; but the surface deposits of Vancouver island, so far as examined, appear to be very much the same.

CLAYS SUITABLE FOR ECONOMIC PURPOSES.

Clays are common in the prairies and British Columbia, and bricks are manufactured at or near all the principal towns. The clays of the plains, however, contain lime, as they are largely derived from the shales, limestones and other rocks of the prairie and Rocky mountains. Iron and other substances, as for example soda, potash, magnesia, &c., are also found in them and are more or less detrimental to clays intended to be used for refractory products such as firebrick, pottery, &c.

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Though ordinary brick clays are so widely distributed over the prairies they are quite thin in many places, and vary in character and composition.

In British Columbia bricks are made in several places, especially at or near the towns. Pressed brick, firebrick and sewer pipes are manufactured at Victoria, Fraser river and other places. Good fireclays occur at Ladysmith and Comox, and on the mainland at Matsqui on the west side of Fraser river.

A highly plastic ferruginous clay, which might be used as a pigment, occurs on Texada island.

From the north arm of Burrard inlet a good brick clay has been obtained.

'A fairly refractory firebrick could be made from an under-clay which occurs in Granite creek, Yale district, and in the Kamloops division of the same district another deposit of good clay is found up Guichon creek.'

Clays of economic value have also been noted on Michel creek, East Kootenay, and on Arrow lake, West Kootenay.

Large cement works are now under construction at Exshaw, east of Banff. They are situated near the Canadian Pacific Railway track. Another extensive establishment of the same kind is being erected in the vicinity of Calgary.

WATER SUPPLY.

A good deal of discussion has taken place recently in regard to the water supply of the great plains. The past summer having been very hot and dry, attention was more particularly directed to the scarcity and impure quality of the water in at least some districts. The chief deleterious substances found in it are said to be soda and potash (generally known here as alkali) and magnesia. Not only are the waters of the lakes impregnated with these substances, but many of the rivers and brooks also contain them.

In spite of the prevalent belief that the waters of the lowest part of the plains are more highly charged with unwholesome substances than are those of the highest parts to the west, it has been found that there is little if any difference, and that the rivers as they debouch from the Rocky mountains contain alkali and other unwholesome ingredients. But it is not only the impure water with which so many of the towns and villages on the prairies are troubled; it is also the bad drainage or sewerage. Owing to the level character of so much of the country the drainage is extremely sluggish in some parts, and several of the towns have really been built on sites where there is no outlet of discharge or means of carrying it off. A serious problem faces them, therefore, and unless means are taken at once to obviate these conditions dangerous consequences may follow.

The quality of the soil in the Great Plains is considered to be excellent, yet here as elsewhere the growth of vegetation depends to a large extent upon the quantity of rain that falls. Wherever there is sufficient moisture crops grow bountifully. Even in the arid tracts irrigation has proved that the soil is rich in all the elements which tend to fertility, and only requires the necessary quantity of moisture to enable it to produce good crops. The black loamy soils with clay underneath are considered the richest on the prairies. But all soils are fertile with a moderate amount of rainfall.

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In British Columbia the soil is different from that of the prairies. Clays, sands, silts and gravels prevail everywhere, however, and the central part of British Columbia has been found a good fruit-growing district.

FORESTS.

On the prairies there is very little forest growth observed until we approach the Saskatchewan river and lakes, though clumps of poplar and willow occur in the more humid parts. These increase in extent, however, and the trees also increase in size as we proceed northward. In certain areas, as for example in the Riding, Duck and Porcupine mountains, there is a forest growth in which spruce is large enough to be used as lumber. North of the Saskatchewan river many valuable timber lands exist (except in Alberta to the north of Edmonton) and a number of saw mills along the banks of this river are operated by lumbermen. Spruce lumber is the chief product.

MARINE DEPOSITS AND SHORE LINES.

None of the surface deposits of the Great Plains appear to have been formed beneath the sea, and consequently any terraces or shore lines observed must have been built up along the borders of lakes or on the banks of rivers. Marine fossils have not been found in them. In British Columbia, however, evidences of a former lower level of the land with reference to the sea have been noted. These occur in the Fraser River valley and around Burrard inlet. In the last-mentioned place terraces were observed, the heights of which were measured by aneroid. Two of these facing the inlet were found to be 330 and 355 feet above sea level. The latter terrace is uneven, however, and much denuded and boulder strewn. The rough wooded character of the mountain slope prevented observations from being made at higher levels.

ON EXPLORATIONS ALONG THE LINE OF THE GRAND TRUNK PACIFIC RAILWAY BETWEEN PORTAGE LA PRAIRIE AND EDMONTON.

Prof. J. Macoun

Early in May I received your instructions to proceed to Portage la Prairie and from thence to make an examination of the country on both sides of the Grand Trunk Pacific as far as Edmonton, Alberta. Besides making notes on the agricultural capabilities of the districts passed over I was also to pay attention to the natural history and make collections of plants, birds and mammals. The appended summary will show in brief the results obtained.

I left Ottawa, June 1, and proceeded to Portage la Prairie. My party consisted of Mr. William Herriot, of Galt, Ont., who assisted me with the botany; Mr. George Atkinson, of Portage la Prairie, who came as cook and ornithologist; and Mr. Ben. Younghusband, who had charge of the horses. We were ready to start on June 8, but owing to continued wet weather we did not leave Portage la Prairie until June 11.

On August 3, 1872, I had been at Portage la Prairie with Mr. Sandford Fleming and found only the Hudson's Bay Company's post, and no settlement beyond Rat creek. Beyond that creek extended an unbroken, deserted wilderness to Edmonton. Seven years later when I again passed through the country settlements were being formed at many points east of Fort Ellice, and on the publication of my report of 1879, a rush took place to the Qu'Appelle valley, which has since grown until now a continuous wheat field extends for fully 200 miles. The conclusions regarding the fertility of the soil which I published in 1872, 1879 and 1880 have been practically illustrated by the results obtained by actual experiment. At this time it is conceded by all observers that the growth of grain throughout the whole of what was formerly called the 'Fertile Belt' is no longer an experiment, but an actual fact and can be relied on for all time. This being a known fact, my work in Manitoba was merely one of comparison with the line of the Canadian Pacific railway, which lay to the south of the Grand Trunk Pacific. Keeping this in mind, I took the road from Portage la Prairie and passed through Bagot, McGregor, Austin and Sidney, at which point we left the road and kept on northwesterly, passing near Petrol and Woodlea to Forrest. From thence we passed through Carnegie, Pendennis and Westwood, camping on Oak river. All the country traversed up to this time had been long settled and, with the exception of the sandhills, was nearly all fenced and occupied. The Grand Trunk Pacific passes through the most fertile part of the district about ten miles north of Carberry, and will draw much traffic from this rich region.

Owing to the absence of roads and the destruction of the old trails, we found it very difficult to get across the country, but this enabled us to see more of the land and my constant record was rich soil and immense wheat fields. From our camp on Oak river we passed northwesterly to Hamiota, through an almost continuous wheat field and for nine miles beyond on the way to Birtle the same character of country was observed.

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After leaving Iliamota we decided to reach the mouth of the Qu'Appelle by way of Birtle, as south of this point the G. T. P. took the valley of the Assiniboine. Owing to the heavy rains and bad trails we found much difficulty in forcing our way to Birtle. We were well repaid, however, as we were able to traverse many miles of country sparsely settled, but naturally rich, though at present wet and much broken up with ponds and marshes.

Our information as to routes being inaccurate, we went from Birtle to Fort Ellice and had to return to the east side of the Assiniboine, and go up the river to St. Lazare where the G.T.P. crosses over to the mouth of the Qu'Appelle. Here we encountered an awful thunder storm, when the rain fell in torrents for twelve hours. On June 29, we crossed the river and travelled by way of Spy Hill, Redpath, Riversdale and northwesterly, to Yorkton. Here we obtained supplies and passed westward to near Willowbrook and thence to Hirzel, where we again reached the G.T.P. From this time forward we were never more than ten miles from the proposed line until we reached Edmonton, and most of the distance was on the engineer's trail.

All the country from the Assiniboine westward to Touchwood and over twenty miles beyond is more or less covered with wood, although there are often great stretches of prairie interspersed with it. Ponds, marshes, rich bottoms and often numerous lakes are scattered without order throughout the whole country. Owing to the heavy rains of June and early July there was a superabundance of water as far as Touchwood, but west of that there was a marked change.

Everywhere the soil was rich, chiefly black loam, and wheat, and all other crops were most luxuriant. In the Beaver hills, the soil was excellent and wood was most abundant. At the Indian Mission near Touchwood, we found excellent wheat and in the garden at the Post all the vegetables of the finest quality usually found in eastern gardens. For twenty miles after leaving Touchwood, the G.T.P. passes through hills or rolling country all of which could be cultivated, and will be when communication is opened up. This district has many settlers now, and will soon fill as all the soil is good.

After leaving Touchwood the hills began to flatten out and there was less wood and brush and more prairie. Settlers' huts could be seen in all directions after the prairie was reached, and about five miles beyond its eastern limit the G.T.P. took a straight course for one hundred miles to Saskatoon. This one hundred miles is almost all prairie and as far as the eye can see in all directions from almost any point, nothing meets it except grass and flowers and occasional homesteads, where there are settlers who are established on the open treeless prairie. All the crops were good, no matter in which direction we went, and the opinions I held of this same region in 1879 were amply fulfilled in 1906. There is practically no bad land, and the alkaline flats or 'bad lands' of former writers are the best wheat fields of to-day. On these extensive prairies the settler's first work is the erection of a sod house and the digging of a well, and then he is established. Fine oats, barley, potatoes and sometimes wheat were found on last spring's breaking, and some settlers would have nearly all they needed for the winter on land broken this year.

When we reached Saline creek, or the discharge of Quill lakes, we turned north for nearly two miles, and found excellent wheat, and settlers who had been there

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for several years. West of the creek the land continued good right up to Boulder (Stony) lake. Owing to white mud flats at the south end of this lake, we were obliged to travel around the north end of it. Passing up the east side of the lake, the soil became sandy, but the crops were equally as good as those on heavier soil.

After passing round the head of the lake we had four miles of boulders to cross where the land was useless as the stones were quite close together. Passing these the country continued level for ten miles, then we passed through a belt of poplars and willows and from them into a series of bare hills containing much gravel. After the hills, we crossed a wide plain lying south of Little Manitou lake. On this plain the soil was dry but rich, but water was scarce and wood was altogether wanting.

An examination of Little Manitou lake was made. It was found in a deep valley with very bitter water and margin of boulders on the south nearly a mile broad. The surface in the vicinity of the lake was very dry and stony and this was the characteristic for the next ten miles, and few settlers had taken up land. After this the character of the country changed, the grass became long and green and in numbers of places the grass on the open prairie had been cut for hay, and great stacks were seen on every hand. From this to Saskatoon, a distance of over forty miles, the land was almost all fit for the plough and much of it had been taken up within the last four years.

Owing to the change in colour of the soil from a black to a brown loam, eastern people would be tempted to speak slightly of the land, but in no case did poor crops appear, and at the Frank settlement, twenty miles east of Saskatoon, we passed through fields of wheat as fine as any we had seen in Manitoba. The soil contains a certain percentage of sand, which, instead of being detrimental, according to a leading farmer in the district is beneficial, as it withstands drought better and heavy rains are not injurious. Frost has never done any damage, and my opinion is that the soil is a naturally warm one and the heat is retained at night instead of being radiated as in the case of black soils. I was constantly struck by the remarkable luxuriance of everything grown in the country between Saskatoon and Touchwood, a distance, as the crow flies, of 125 miles. Wheat, oats, barley, flax and potatoes were constantly good, except where they were very late in being planted or sown.

I am quite safe in saying that all the land from Touchwood to Saskatoon is suitable for wheat-growing except the stony tracts around Boulder lake and Little Manitou lake. Nearly all the country is level or gently rolling and fit for the plough, and the Grand Trunk Pacific will open up an immense extent of wheat lands which would otherwise have no outlet.

When we were at Saskatoon, during the last week in July, scores of houses were in course of erection. Having obtained the necessary supplies and made some repairs to harness and waggons, we started west on the afternoon of July 28, and drove sixteen miles. Our way led through the Smith settlement, in which there were many excellent farms, and where immense wheat fields met the eye on every hand. This old settlement, Summerdale, stands next, in my mind, to the splendid farms we saw north of Carberry, in Manitoba. Passing through the settlement, we saw fields of poor wheat amongst the very best, and learned from a farmer the cause. The spring

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was cold and backward and all wheat looked well when it came up, but that on the best worked land seemed to get chilled at the time of the cold rains in May, as it never recovered.

The country which we travelled over was thickly settled for about ten miles, after which it became more or less sandy, with alkali flats for five miles. Then for twenty miles to the crossing of Eagle creek there were many settlers. Beyond the creek there were very few settlers, but the land seemed suitable all the way to the Bare hills. This district has little water and no wood, and west of it is the Bare Hills district, so named because they are without tree or bush for many miles. The soil in the Bare hills is very good, and few of the hills are too steep for the plough, so that in time they will be settled. The characteristic soil of the country is a light-coloured, sandy loam changing to brown.

A drive of fourteen miles brought us to a big spring on the western side of the hills. The trail through them is not difficult, and the western side has abrupt hills with much sand in them. The afternoon drive was very varied in character, as the soil changed from a light sand to clay, with many saline lakes and ponds in the depressions. Scarcely a bush was seen and no trees. The Eagle hills lie to the north, but were too far off to be seen.

We now entered on a series of salt ponds and lakes, among which is Whiteshore lake, so called on account of a white incrustation on the shore left by the evaporation of the water. Both here and on all parts of the prairie we found the saline water always in the deepest depressions, and good water in ponds where the land was elevated. All the country covered by drift has either good water on the surface or it can be obtained by sinking wells which are seldom over thirty feet deep. If a well should be sunk through the drift into the clay below, bad water is the certain result.

Ponds only a short distance apart, but on different levels, were often found containing sometimes good water and sometimes bad water. The bad water was always on the lower level.

The forty miles beyond Whiteshore lake to the head of Tramping lake was all prairie, altogether without trees, and having very little good water on the surface. For the first twelve miles the country was very dry and the grass short. Its surface was undulating and the soil apparently very good. After passing through a series of low hills we came on a level plain that extended all the way to the head of Tramping lake. As we neared the head of the lake the grass became greener, but neither water nor brush was noticed until we reached the ravine at the head of the lake. Wells had been dug in the ravine by settlers living close by, but the supply of water was meagre. Considerable breaking has been done since spring, when most of the settlers came in, but the oat crop was scanty, although potatoes looked well. South of Tramping lake many houses could be seen, and the settlement seemed older. The settlers met with were invariably from the United States and all seemed pleased with their prospects.

At Tramping lake the country is almost a dead level, and as a consequence there is neither wood nor water, except a few willows in the ravine and the shallow wells spoken of above. These conditions prevailed until we neared Kill Squaw lake, when the depressions became deeper and occasional bushes and some poplars were seen. Around

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this lake there are immense hay marshes a very few feet below the general level of the prairie with its crisp and dried up grass. After passing around the hay marshes we worked around more to the north and could see a line of high ground running around to the northwest. It was now evident that we had passed over a height-of-land and had begun to descend over a very uneven surface towards the west. As we approached the head of Round valley the land dipped considerably, and at the Grand Trunk Pacific construction camp we came on a fine spring of good water, evidently from sand hills which extended to the south.

Round valley is the crossing place of the branch of the Canadian Pacific railway extending from Saskatoon to Wetaskiwin, and the Grand Trunk Pacific railway coming from Saskatoon to Edmonton. From Saskatoon to this point we could never tell which railway we were passing along. The crossing takes place at the east end of the valley, the Canadian Pacific railway taking the south side and the Grand Trunk Pacific railway the north side. On the south side there is a range of low sand hills, and on the north there is a level plateau of excellent soil extending towards Battleford.

The line of the Grand Trunk Pacific passes down the valley from Round lake for about four miles, when a range of sand hills is reached. Passing these we found a hilly country with good water and a fair supply of wood. As we approached Lake Manitou the country became rougher with numerous sand hills, but generally the soil was good and many extensive tracts of good land were passed. Wood and water were abundant and the country is well suited for mixed farming.

Eye Hill Creek valley is well suited for stock farming as there is an abundance of water and wood and extensive hay marshes in many places, especially south of Lake Manitou. The country south of Lake Manitou is very much broken and rises into ridges and high hills with narrow valleys between. There is plenty of wood and water, and a luxuriant vegetation towards the lake. For ten miles after this we were travelling westerly through series after series of sand hills and patches of burnt woods. At last we passed the hills and reached a rich rolling country and lunched at an engineer's camp exactly on the 4th principal meridian, the boundary between Saskatchewan and Alberta. Before we reached the camp even the highest hills bore a very luxuriant crop of grass and were well suited for the plough. After leaving the camp there was a constant improvement in the country; the hills became less steep and the valleys wide enough to make good farming lands. There was not a settler on the whole twelve miles to Ribstone creek, yet we were delighted with it, and there was wood and water and a fairly level country. The vetch and pea vine formed thickets that was almost impassable.

We camped on Ribstone creek, in township 14, range II, and section 2, west of the principal meridian. The creek was found to be about twelve feet wide with banks from four to six feet high. Its valley frequently expands, and there are fine hay bottoms, becoming continuous farther west. The settlers west of the creek had cut hay; and oats on this spring's breaking were fairly good—fully ripe on August 12. During the 13th we passed up Ribstone creek, and saw numerous settlers just making a commencement, and all were pleased with their prospects. After passing through four miles of sand hills we recrossed Ribstone creek, and found the whole valley a continuous hay meadow. We saw no settlers, and hay was being cut in only

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one or two places, until we reached the location of Mr. George Hunt, where we camped. His location is an ideal one for a stock farm, as he has high sand hills, with wooded ravines to the south, while to the north he has the extensive meadows along Ribstone creek and his ranch house is on a beautiful lake of fairly good water.

From the third crossing of Ribstone creek to Battle river, a distance of twenty miles, the land is all fit for settlement, and much of it is taken up, though few settlers were seen. Some fields of excellent oats on spring breaking were noted and many haystacks were observed. Evidently the country had changed very much for the better, and continuous settlement was only a matter of time.

Battle river flows in a deep, narrow valley at the crossing, but the land on both sides at prairie level is excellent, though water on the surface is scarce owing to the lack of depressions. Along Grattan creek the land is much broken by ravines leading into the creek, but a mile or two back of the creek the whole country is fit for settlement. Passing westward from Grattan creek the country becomes much broken, but the soil was good and there were many ponds of fresh water. Later the hills became more elevated, with many deep depressions, but before we camped the hills had flattened out considerably, and we entered on a splendid farming country where settlement had only begun last spring.

Our camp was in township 47, range XII., and section 22. In every direction from this camp we found first-class soil, plenty of ponds, and land all fit for the plough, with sufficient wood for fuel. We had now reached the outskirts of the settlements, and from this time forward we were never out of sight of houses except in Beaver Lake hills. In a garden at Thomas lake we found all kinds of vegetables growing in perfection: Indian corn, squash, pumpkins and cucumbers. The corn was almost fit for the table and the cucumbers were ripe on August 19. On this date we had a slight frost, but it did no harm, and hardly touched the potato tops.

From our camp to the west side of Beaver Hills lake, a distance of about sixty miles as the crow flies, was more or less settled, and all the oats and wheat were ripe and some of them in stack on August 22. Almost all the land was fit for the plough, and in many places there were large settlements, where the land was fenced in and the roads graded. Owing to the level character of the country water was scarce, and we were informed this was the only drawback.

The district around the south end of Beaver Hills lake, which is fourteen miles long and eight broad and whose waters are quite fresh, is very rich and beautiful, and at no distant date will be one of the finest in Alberta. The lake has no banks and rich lands slope down to it on all sides.

A twenty mile drive through Beaver Lake Hills forest reservation brought us to Base Line road, and along this we travelled rapidly to Edmonton, where we arrived on August 24. Ottawa was reached on September 2.

EXPLORATIONS ALONG THE PROPOSED LINE OF THE HUDSON BAY RAILWAY.

W. McInnes.

The region dealt with in the present preliminary report lies to the northeast of the lower Saskatchewan, extending from that river at the Pas to Split lake, where the Nelson river approaches most closely the headwaters of the Little Churchill.

It is bounded by north latitude $53^{\circ} 50'$ and $56^{\circ} 10'$ and by west longitude $99^{\circ} 15'$ and $101^{\circ} 15'$. Its general elevation above the sea is between seven hundred and nine hundred feet. It is accessible at the present time only by canoes, the northern and eastern parts by way of Lake Winnipeg and the Nelson river and its tributaries, and the southern part by way of the Saskatchewan river, either down stream from Prince Albert or up stream from Lake Winnipegosis by way of High portage and Cedar lake.

For purposes of general description it may, in a broad way, be divided into three areas; the limestone area embracing all the tract underlaid by the horizontal or gently undulating, magnesian limestones or dolomites of northern Manitoba; the Archaean area, a somewhat broken and rugged country extending from the northern edge of the limestone escarpment northward and eastward until covered by the lacustrine sediments of the third or clay area. The latter, a gently-rolling, clay-covered country, extends from the valley of the Nelson river on the east to a contour, westerly, where the general elevation of the land is in the vicinity of nine hundred feet above the sea, or to approximately west longitude $99^{\circ} 30'$. The northern edge of the clay basin was not reached, but the Indians of the Burntwood River region agree in saying that the Churchill River valley forms its most northerly extension.

The last of the three divisions is, generally, well suited for cultivation, but throughout the first two the areas suitable for agriculture are of limited extent.

No part of the region is prairie though along some of the valleys, and here and there on the uplands, are found extensive hay marshes, with only occasional small clumps of willows, that, with drainage, would become virtually prairie lands.

The fairly close examination made last summer has shown that the arable lands of any considerable extent are confined to the old basin of the so-called glacial Lake Agassiz. The tracing of the outlines of this extensive, ancient lake, that has long ago receded from the greater part of its former basin and is represented now only by a series of separate, smaller lakes, would perhaps strike one at first as being of academic rather than practical interest. A little consideration of the conditions prevailing in that country will, however, show that it is a matter of the greatest practical value.

The region has been most profoundly glaciated. At least two great glaciers, almost continental in extent, swept over it, and it will readily be believed that all the softer rock surfaces were planed away. No decayed rock was left and the limited areas under-

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lain by the more easily disintegrated rocks became the basins of lakes or the valleys of streams. The horizontal limestones, or rather dolomites (as they are all somewhat highly magnesian), are too hard to give way easily to atmospheric weathering and we must, therefore, look to some extraneous source for any considerable soil cover.

This source is found in the sedimentation that went on at the bottom of Lake Agassiz. Confined on the north and east by barriers of glacial ice, from which poured the sediment-charged streams that supplied its waters, the lake was being constantly and rapidly silted up by the deposits dropped by the quiet and gradually clearing water. The more siliceous and heavier deposits and the greater volume would be laid down nearest to the source of supply at the edge of the glacial boundary, and as the distance from this source increased the clays would be deposited in less volume by the clearer water and would be lighter or less siliceous in character. Quite in harmony with this we find that the northeastern part of the area is covered by a mantle of siliceous clay reaching a thickness, in the valleys, of upwards of a hundred feet. Owing to the gradual recession of the ice the greatest thickness is not found close to the eastern rim of the basin but at some distance from it, where deposition continued for a longer period. Westerly from the zone of greatest sedimentation the deposits become gradually thinner and *pari passu* less siliceous. This thinning out of the clay as the distance from the glacial barriers increases is, of course, not to be attributed solely to the gradual clearing of the water. The increasing elevation of the land in that direction involves a shallowing of the waters of the lake and hence, necessarily, a lessening deposition of sediment.

Though a wooded country throughout there are but limited areas where the forest growth is of a size to be commercially of much value. There are no hard woods, the only deciduous trees that attain merchantable measurement being the canoe birch (*Betula papyrifera*), the aspen and balsam poplars (*Populus tremuloides* and *P. balsamea*) and the tamarack (*Larix Americana*). Black spruce (*Picea nigra*) is the most abundant coniferous tree and grows to a size sufficient, at least, for pulpwood. Associated with tamarack, it covers all the more marshy tracts, giving way, where the land becomes dryer, to white spruce, (*Picea alba*), which is the timber tree of the region, and, on the driest ridges, to Banksian pine.

Forest fires have been wide-spread and most destructive throughout the whole region, sparing only the very wet, muskeg areas and a few tracts isolated by surrounding water or marsh. In some places on the uplands the charred stumps were seen to indicate the passage of two successive fires at intervals of about forty years. Most of the fires seem to have been due to carelessness on the part of native travellers, for violent storms with lightning are not of frequent occurrence and during the whole summer but one trunk was noticed that had been shattered by lightning.

Geologically the region may be said to consist of a deeply eroded Archaean peneplain overlain in its southern portion by Palaeozoic sediments consisting chiefly of dolomites and in its eastern portion by Pleistocene clays. By far the larger part of the area, if we include that portion covered by the clays, is overlain by Laurentian biotite gneisses of various textures and with varying accessory minerals. The basins of Reed and Wekusko lakes and the greater portion of the valley of Grass river down to about longitude 99° 20' have been excavated in the more easily eroded schistose rocks of the

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Keewatin, and a belt of the same rocks crosses Pipe lake and touches the Burntwood river below Manazo fall. This Keewatin is made up mainly of gabbro, diorites, and hornblende, chlorite and other schists. With these are associated areas of intrusive granite, some of which, below Reed lake, are of even texture and bright red colour and would furnish very beautiful stones for monumental work and ornamental building.

Associated with the Keewatin below Reed lake is an area of felsitic rocks and conglomerates that, from the character of the included pebbles, must at least be as high up as Lower Huronian, as it contains among other pebbles pieces of banded jasper similar to that of the iron formations of the Keewatin. The source of these included fragments was not found.

Quartz veins are plentiful throughout the Keewatin belts, but with the exception of arsenical and iron pyrites and traces of copper, no valuable minerals were found in them, though their character, particularly where exposed on the Grass river below Reed lake, was considered promising enough for the occurrence of the minerals that are so often associated with these rocks.

Palaeozoic limestones cover all the country between the Saskatchewan and an east and west line cutting the southern ends of Reed and Wekusko lakes. They have been considered to be of Silurian age with but a narrow strip of underlying Cambro-Silurian projecting along their northern edge.* A collection of fossils made at Cormorant lake during the summer, examined by Dr. Whiteaves, seems to indicate that the beds containing them are of about the age of the Winnipeg limestones, and, therefore, Cambro-Silurian. The rocks are, as far as examined, magnesian, and are probably all dolomites. They occur in flat-lying or gently undulating beds varying in thickness from six feet or more to quite thin and shaly, the latter occurring near the base and the heavy beds forming the mass of the formation. Many of the heavy beds are even-grained and uniformly bedded, so that they can be readily taken out in blocks of even thickness and of any required size. Many of the low cliffs near the lakes are so situated as to be admirably adapted for quarrying.

In order to follow as closely as possible the direction that it was considered, from the general conformation of the country, that the line of the projected Hudson Bay railway would probably pursue, a route was selected for the transportation of supplies leading from the Nelson river at Split lake southwesterly to the Saskatchewan river at the Pas. As only the first seventy miles of the road beyond the crossing of the Saskatchewan had been actually located on the ground, there was an interval of one hundred and seventy miles between the end of the located portion and the headwaters of the Little Churchill, where its position could be only approximately inferred. It was necessary, therefore, to make a general exploration of all the section of country lying between these two points and to do this, the valleys of the Burntwood and Grass rivers, between which, for the greater part of its course, the road must be located, were selected as bases from which to work, the intervening country being reached by ascending tributary streams and by excursions across country.

* Annual Report Geological Survey of Canada, Rep. F.F., Vol. XIII.

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The Nelson river, which was descended to Split lake, was but cursorily examined in passing as it did not come properly within the scope of the season's investigations and had, moreover, been reported on by various explorers in the past, notably by Dr. R. Bell* and Mr. J. B. Tyrrell.**

Between Lake Winnipeg and Split lake, a distance of about two hundred and twenty-five miles, the river has a descent of, approximately, two hundred and seventy feet. The current, between the numerous lake expansions, is generally swift, and upwards of a dozen falls and rapids occur, some of the former offering magnificent sites for water powers. The aggregate power that could be generated along the river is enormous, as the amount of water passing over the various falls is very great. The volume of the river can best be appreciated by a consideration of the extent of its drainage area, which embraces all the country, westwards to the mountains, between the watershed of the Churchill and Athabaska on the north and the Missouri on the south, and eastwards to the headwaters of the Albany river and to within fifty miles of Lake Superior. Twenty-one miles down the river the Hudson's Bay Company maintain a fur-trading post known as Norway House; the chief factor in charge of the district cultivates a large garden where, on June 10, peas, beans, beets and other vegetables were well started. Wheat has been successfully grown here as well as at Cross lake farther down the river, in lat. $54^{\circ} 40'$. There are many tracts of land along the river suitable for cultivation, though for long stretches the banks show only rounded surfaces of biotite gneiss, smooth and glaciated. The cultivable areas are confined to tracts overlain by lacustrine clays which alternate along the shores with glacial gravels and the bare rock surfaces devoid of any soil cover. The prevailing rocks exposed along the river are biotite gneisses. Only at two places on the shores are other rocks seen, at Pipestone lake and on the southern shores of Cross lake, where a belt of Kewatin rocks crosses, and for some miles follows, the river valley. The exposures at Cross lake are promising looking for the occurrence of gold, resembling closely, as they do, the gold-bearing strata of the district east of Lake of the Woods. They are cut by intruded masses of the same crushed granite with blue opalescent quartz, known locally in the eastern region as *Prologine*. Below Cross lake no land is under cultivation until Split lake is reached just north of latitude 56° , where the postmaster for the Hudson's Bay Company raises potatoes and the commoner garden vegetables. White and black spruce, tamarack, aspen, balsam and canoe birch form the forest surrounding the lake, the deciduous trees for the most part growing only in a fringe along the immediate shores. Trees of suitable size for sawing into eight and ten inch boards are found on the islands, along the stream valleys and in places near the lake shores, but the general average size of the trees inland is smaller than this. Northwest of the Hudson's Bay Company's post the country is generally low, swampy and intersected by a network of small lakes; near Waskaiowaka lake, however, an extension northeasterly of the clay land of the lower Burntwood valley forms a comparatively dry ridge along which a good route for the railway can probably be found to the valley of the Little Churchill.

Burntwood River.

Burntwood river, a tributary of considerable volume, flows from the west, into the

* Report of Progress, Geological Survey of Canada, 1878-79-80.

** Annual Report, Geological Survey of Canada, 1901.

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long westerly bay at the southern end of the lake, and its valley will probably be followed approximately by the railway along this part of its course.

The shores of the bay into which the river flows are, almost all along, low, rounded ledges of fine black and coarser, white biotite gneiss striking east and west. The neighbouring land is low, rising from the lake to a height of about twenty feet in a few chains and then much more gradually to about fifty feet, with occasional ridges of sand and clay reaching elevations of seventy feet.

The forest is mixed second growth, mainly spruce and tamarack, varying in age from recent brûlé to fifty years.

The water of the Burntwood carries in suspension more sediment than the main Nelson, so much so as to be hardly at all transparent.

As the lake is left and the river ascended, the banks become higher, rising with a steep slope from the water level to fifty feet, and are composed of a siliceous clay that, where exposed through the burning of the protecting forest cover, becomes readily water soaked and unstable, giving way at intervals and sliding into the river bed. Eight miles from the mouth, the Odei or Heart river, a smooth flowing stream of considerable size, comes in from the west on the left bank, occupying a well marked valley with clay covered hills rising to heights of a hundred and fifty feet on both sides. The main river here makes an abrupt turn, flowing directly west for two miles, and the tributary rather than the main stream seems to be following the ancient pre-Glacial valley. Though the clay mantles covers all the hills an occasional cliff-like slope shows the underlying gneiss and proves that the river is flowing in an old rock-faced trough.

The clay, lying deep in the valleys and covering the summits more thinly, softens the surface contours and produces a country without high relief where the original, somewhat rugged Archaean surface has been smoothed down by the partial filling of the hollows and the lowering of the gradients. A few miles farther up the river, above a series of short rapids, the immediate banks are low, rising by a gradual slope six to twenty feet above water level and then extending back with a moderate slope for from two to three miles, where a height of about a hundred feet is reached. Much of this land is, apparently, well adapted for cultivation; the clay is entirely free from boulders and mixed near the surface with enough vegetable humus to produce a friable and seemingly productive soil. The gentle slopes give good natural drainage and the open character of the forest makes it a country easily cleared. But little timber left is of a size larger than eight inches in diameter, three feet from the ground, all the dryer parts, denuded of old forest by the repeated fires that have swept over the region, being covered by trees of only ten years growth or younger.

For the next nineteen miles the river valley and neighbouring country present the same general aspect. Here the valleys of the main river and the Odei approach one another, separated only by a dividing ridge a little over a mile across and a hundred and fifty feet high. The ridge is clay covered to the flat summit where knolls of the underlying gneiss project here and there from the soil. Beyond the valley of the Odei, to the north, is a rolling, forested country, the hills, clay covered to the tops, rising by gradual slopes to about a hundred feet above the intervening valleys that are themselves from twenty to fifty feet above the river level.

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The forest is mainly spruce and tamarack of about sixty years growth, the larger trunks reaching diameters of from eight to ten inches, but the general average not more than six inches. In the valleys occasional white spruces and tamaracks attain diameters as great as eighteen inches. These are trees that have escaped when the surrounding forest was burned and are sufficient evidence that, but for the repeated fires, there would be large areas covered with good timber. For the next twenty-eight miles the river, flowing in a rock bound basin, has the character of a long, narrow lake from half a mile to over a mile in width. Covering the well-rounded ledges of gneiss that form the immediate shores is the same thick mantle of clay forming a country of very attractive appearance. Rising gradually from the river level to heights of from twenty to fifty feet, a flat or gently sloping plateau extends back from two to three miles to another rise, where the general level is increased to about a hundred feet. Recurring forest fires have not only denuded this section of its trees, but the stumps have for the most part been burned away so that it is now covered only by an open growth of small white birch, poplar, willow and Banksian pine, with an undergrowth of vetches, grasses and small shrubs. Just above is the Manazo fall where the river pitches over a ledge of gneiss with a vertical descent of thirty feet.

The probable course of a railway through this country would cross the river at one of the rapids below Manazo fall, where ledges projecting from either shore give good foundations for piers, and follow the north side of the river valley along the plateau land described above to the valley of the Odei, which would be crossed near where the two rivers approach one another. This would afford fairly deep water connexion with Split lake and the Nelson river, and their sturgeon fisheries, by way of the deep and smooth flowing Odei and Burntwood rivers.

Above Manazo fall the river expands again to form a long, narrow lake for the next ten miles of its upward course. The same rolling clay plateau extends back from both shores of the lake, rising gradually to an undulating, higher tract, perhaps 100 feet above the lake level. The forest growth is still very open, allowing a good surface carpet of grasses, vetches and other vegetation. Diversified here and there by small open tracts where the grass-covered surface is free from trees, this country often presents quite a park-like aspect. Throughout all the clay-covered region the absence of erratics is striking; for miles no perched boulders nor transported materials of any kind other than the lacustrine sediments, are seen, and even the country rock is deeply hidden under the heavy clay deposits that seem to be very homogeneous throughout, not laid down in thin layers as in the case of many clays of apparently similar origin in eastern Canada, but, if stratified at all, only in very heavy beds that seldom show their bedding planes. For the next fifteen miles to Wuskwatim lake the river has a quicker descent and its course is broken by several small rapids. The surrounding country is slightly higher, rising in places about 200 feet above the river, and more steeply from its shores. From the south shore a clay-covered bench a quarter of a mile wide rises to a comparatively steep slope to a height of 130 feet, and extends back for miles at about that level, with a gently undulating surface, free from boulders or rock, excepting very rare exposures. As a matter of fact but one small knoll of the underlying rock was actually seen, rising through the clay at a point about two miles back from the river. The low flat along the river is covered by a sixty-years timber growth, mainly of Banksian pine and spruce.

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The higher plateau is wooded principally with spruce from six to eight inches in diameter with scattered Banksian pines, poplars and white birches succeeding an earlier burned forest that was even younger when destroyed, and this following a still earlier, that by the stumps, is shown to have been somewhat larger. Evidently this country has been subjected to repeated burnings that have followed one another, often at intervals of comparatively few years. The areas of muskeg on the upland do not seem to be extensive and no gravel beds nor boulder ridges were seen. The Indians report that this plateau-like country extends right across to the valley of Grass river, with only gently swelling ridges and no high hills.

Wuskwatim lake is eight miles long by four wide, with a long bay extending off to the west from its southern end. The waters are but slightly turbid from suspended sediment, and abound in whitefish of good quality, and small sturgeon. On all sides of the lake are large tracts of nearly level clay land, extending back for several miles at heights of from fifteen to fifty feet above water level, and beyond that continuing at a level of a little over 100 feet. A mixed second growth forest, mainly aspen poplar, covers all the uplands, while on the islands and on low flats bordering bays of the lake are found white spruces and poplars of diameters up to one foot. The grass-covered slopes that rise with very gentle gradients from the shores of the lake make this a country of most attractive appearance, and one that apparently would be well suited for cultivation. The Indian inhabitants of this section cultivate with success small garden patches of potatoes.

Bordering many of the bays of the lake are sand beaches, the first seen on the river, made up principally of garnets and other Archæan detritus, but containing also in smaller proportion limestone pebbles derived from the Hudson Bay basin.

Mr. J. B. Tyrrell, who visited this lake in 1896, has this to say of it.*

‘Wuskwatim lake is a very pretty sheet of slightly murky water, six or seven miles long and three miles wide, surrounded by sloping clay-covered hills, wooded with white spruce and poplar. Its surface is varied by a few islands composed of clay overlying a floor of gneiss. The two falls above-mentioned at and near its outlet, would furnish a large amount of power for driving mills or machinery of any kind, while a supply of timber for building and fuel could be obtained from the surrounding country, and the soil would grow any of the ordinary roots or more hardy cereals, so that it is not improbable that before long when this fertile country is made accessible by the advent of a railroad from the south one of the most prosperous towns in the district may grow up on the shore of this now secluded lake.’

Following the most direct practicable route, the line of the prospected Hudson Bay railway will probably pass within a short distance of the south shore of this lake.

Country of the same general character is seen for the next thirty miles up the river valley, covered, for the most part, with a mixed second growth from ten to thirty years old, but with, here and there, clumps of white spruce with tall and straight trunks a foot or more in diameter. Charred stumps of large size show that over considerable areas in this region the original forest was of great commercial value.

* Annual Report, Geological Survey of Canada, 1901, p. 34.

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On the shores of Footprint lake, in latitude $55^{\circ} 45'$ small fields of potatoes planted by the Indians were looking remarkably well, the vines being eleven inches in height and about ready to blossom when this locality was visited, on July 10. Above the lake broad flats extend back from the river on both sides rising, from half a mile to a mile back, to fifty feet above the river. The greater part of the flats and practically all the high land has been burned over within twenty years, and is clothed now with an open growth of small mixed timber; the land is free from boulders and gravel and has a good carpet of native grasses, including such good meadow forms as the blue-joint, *Calamagrostis canadensis*, *Calamagrostis hyperborea* and the wild rye (*Elymus dasystachyum*). The open character of the forest permits a somewhat luxuriant growth of these grasses, mixed with vetches, strawberry vines, &c., and with currant, gooseberry and other small shrubs and bushes.

The land lying to the southward of the most southerly band of the river was found to rise with a comparatively steep slope to a height of sixty feet above the river, and to extend back as a level clay-covered plain with about five inches of clay-loam soil well mixed with vegetable matter gradually merging downwards into pure clay. The plateau has a gently rolling surface, the bottoms of the hollows, where small areas of muskeg often occur, having a deviation forty feet lower than the slopes of the ridges, and the highest land reaching not more than 100 feet above the river. For six miles back the areas of muskeg, that are not sphagnum swamps, but rather grassy marshes, are comparatively insignificant in extent, the higher land, wooded with Banksian pine, poplar and spruce and diversified by many open grassy glades, largely preponderating. Beyond this, however, a broad belt of wet, grassy marsh land extends southwesterly across to the heads of brooks running into Grass river below Wekusko lake, and forms practically the western limit of the clay-covered uplands, though in the river valleys and along the flanks of their bordering hills the clay land extends much farther west.

Of the whole of this extensive plateau land, extending from the valley of the Nelson river westward to near Burntwood and Wekusko lakes (west longitudes $99^{\circ} 45'$) northerly at least to beyond latitude 56° and southerly to the limestone escarpment, an area of about 10,000 square miles, it may be said it is characterized by a heavy clay soil entirely free from boulders. Lacustrine clays, composed of the rock flour once held in suspension by glacial streams and deposited by them as they reached the quiet waters of a great lake, are essentially the soils of this region. There is no distinct surface soil clearly separable from the clay subsoil; the one merges gradually into the other, the clayey character of the soil being strongly apparent at the very surface where merely the shallow cover of decaying leaves and other vegetation is scraped away. Generally, for from five inches to over a foot down, the clay is deep brown in colour from the admixture of vegetable matter, and quite friable, and rootlets of even the smaller surface vegetation reach down far below this level, though on the tops of many of the ridges the light-buff coloured clay without any appreciable coloration from vegetable matter comes quite to the surface. The rolling character of the plateau generally provides fair drainage, but over considerable areas in its central portion, far from the valleys of the larger streams, there are large tracts that have not sufficient gradients for the proper flow of the surface water, and could be made available for agricultural uses only by being artificially drained.

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Beyond the western limit of the good country, which is reached in about longitude $99^{\circ} 45'$, is a typical Archaean surface, consisting of high gneiss hills bare and rugged, with intervening deep and sharp valleys generally occupied by muskegs. On the steep flanks of some of the slopes Banksian pine and spruce grow to a fair size, but, owing to the thinness or entire absence of soil-cover, the bare gneiss hills, dévoid often even of moss, are covered only by a scattered growth of small trees. Little flats along the river valleys are overlain by clay, which extends up the steep sides of the bordering hills for only forty feet or less. The clay deposits often become quite gravelly, or give place to sand, showing probably an approach to the old shore lines of the lake, in the deeper parts of which the heavy deposits of clay were laid down. On these tracts white spruces grow to diameters of from a foot to two feet, but the areas are very limited in size. This section of country referred to as Archaean embraces all the land extending from the escarpment marking the overlap of the Palaeozoic limestones, which follows a nearly east and west line, touching the southern ends of Reed and Wekusko lakes, indefinitely to the northwest; it has generally the same rugged character, with but very limited areas that are fit for cultivation, and must be considered as valuable mainly in the possibilities offered by the Keewatin belts, that here and there traverse it, for the occurrences of valuable minerals. No mineral deposits of value were noted, though traces of copper were observed in the vicinity of File lake.

The country lying to the south of the Archaean area, between it and the Saskatchewan valley, contains very few tracts of land suitable for settlement. Practically only the river valleys, a few tracts adjoining some of the lakes and parts of some of the slopes flanking the limestone ridges can be considered as affording land suitable for cultivation. The upland is generally almost bare of soil, flat-lying limestones forming its actual surfaces, and the slopes, though covered to a good depth by clay, are for the most part too bouldery for tillage. Limited tracts here and there occur suitable for individual holdings, notably near some of the principal lakes. The largest of these, Atikameg (locally known as Clearwater), Cormorant and Reed lakes, are very beautiful sheets of clear water, well stocked with fish, including lake trout and whitefish. All are skirted by the located portion of the line of the proposed Hudson Bay railway, and may be expected with its advent to become favourite summer resorts for the people of the growing western cities.

Atikameg, the most southerly, nearest to the Saskatchewan, is a sheet of quite colourless, pellucid water, about eight miles square, its expanse unbroken by islands, and attaining in its central parts depths of upwards of a hundred and fifty feet. It is apparently fed, principally, by seepage through the gravels and by springs following the bedding planes of the limestones from the Saskatchewan watershed, as no brook, worthy the name, flows into it, though the outflowing stream is of good size even at lowest water.

Cormorant lake, into which the last named flows by a short stream with a fall of twelve feet, is about half as large again. Its water, though not quite colourless, is clear and free from sediment, and its surface is diversified by many islands, some of large size. The islands are flat-topped limestone ledges, generally showing low cliff faces rising from deep water but varied by occasional sandy and bouldery

beaches; they are well wooded, and many of them would furnish ideal spots for summer residences.

Reed lake, the most northerly, lies just without the limestones that terminate in a low escarpment fronting its southern shore. It has about the same area as Atikameg, but a much less regular outline, and the shores are fringed by more than a hundred small islands.

The hard magnesian limestones or dolomites about these lakes would furnish good building stones, the natural bedding of the rocks causing them to break out readily into blocks from a foot to five feet in thickness and of almost any required sizes.

The immediate valley of the Saskatchewan in this neighbourhood is so low as to be inundated annually by the river, excepting at rare points, such as the so-called Pas ridge where a low swell composed of clay and boulders rises a few feet above the highest water level. The rise in the waters of the river between low and high water at this point amounts to as much as eighteen feet and occurs generally in July.

On the north side of the river at the Pas, beyond a low flat, a kame-like ridge, with a gravelly surface and clay and boulder cone, rising from seventy to ninety feet above the river, follows the course of the stream upwards for five miles to the Bid Eddy where it swings northerly and continues for another eight miles, or almost to Atikameg lake. This ridge forms a sort of natural highway along which the Indians have a road to their autumn fishing grounds in the lakes and which has been utilized by the engineers for the location of the railway line. Along the wider parts of the ridge and on the flat at its base are situated Indian and half-breed settlements where the natives are generally living comfortably in good houses, many of them raising horses and a few cattle but few paying much attention to the cultivation of the soil, contenting themselves with small fields or garden plots of potatoes and the commoner vegetables.

Over the whole region the areas of forest, where the trunks are large enough to be of commercial value, are limited, though, but for recurring fires in the past there would be a magnificent forest cover over the whole area, stunted only on the muskegs and in the Archaean and limestone areas and on the hill tops where the soil is wanting or too thin to support a good growth. The principal tracts of large, standing timber are situated to the north of Moose lake, to the west of Atikameg, in the lower Grass River valley and on the ridge separating Cormorant and Yawningstone lakes. The last named tract contains white spruce of exceptionally large size with tall clear trunks. Smaller areas are found on islands and points in the various lakes, along the upper valley of the Cowan river and, in clumps, along all the stream valleys in the district. Smaller timber, mainly black spruce, that would be of value for pulpwood, is much more widely distributed over large areas.

Over part of the Archaean area the white spruces were suffering from the attacks of fungi that infested the leaves, causing them to turn red and wither as though fire-killed.* This fungus which Professor Macoun has ascertained to be *Peridermium decolorans* was found only on the white spruces, though it does not generally confine its attention to any one species of spruce. The injury to the trees will probably not be permanent, resulting only in most cases in a slight retardation of the growth.

*Vide Canadian Forestry Journal for October, 1906.

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A table is appended giving the comparative ages of trees throughout the region at various ages.

AGES OF TREES.

	Years.
Spruce, 4 inches in diameter, 3 ft. from ground, Burntwood river..	35
" 7 " " Burntwood river..	85
" 5 " " File lake	58
" 44 " " File lake	52
Banksian pine, 6 inches in diameter, 3 ft. from ground, File lake..	58
" 10 inches in diameter, 3 ft. from ground, Sand plain, north of Reed lake.	95
White spruce, 12 inches in diameter, 3 ft. from ground, Clay flat, below Wekusko lake, Grass river.	85
Aspen poplar, 12 inches in diameter, 3 ft. from ground, Clay flat, below Wekusko lake, Grass river.	110
White spruce, 12 inches in diameter, 3 ft. from ground, below Reed lake, Grass river.	108
White spruce, 14 inches in diameter, 3 ft. from ground, Cowan river, near bank.	153
White spruce, 8 inches in diameter, 3 ft. from ground, Cowan river, 2 chs. back.	155
White spruce, 7 inches in diameter, 3 ft. from ground, south of Yawningstone lake.	156
White spruce, 11 inches in diameter, 3 ft. from ground, south of Yawningstone lake (trees still growing at good rate).	160

The ages of the trees given in the table above were computed by counting the rings of annual growth and adding from five to eight years for the earlier life of the tree before reaching the height where the rings were counted. It will be noted, that in all cases the trees are of comparatively small diameters for their ages, or, in other words, that the annual growth is small.

They would furnish, therefore very firm and strong lumber and the smaller trees, owing to their closely packed fibres and the comparative absence of open cellular matter, would be especially well adapted for the manufacture of wood pulp for paper making.

The question of climate is one of vital importance in connexion with this region, and while, of course, no final or very definite statement can be made with reference to it from the observation of one season, some facts bearing on its general fitness for agriculture may be given.

Experimentally but little is known of its capabilities, though we have instances here and there throughout the area, to beyond its northerly limit, of the cultivation of all sorts of garden vegetables, including at the Pas, tomatoes and Indian corn. On September 6. of this year. Indian corn was seen in Mr. Holcom's garden at the Hudson's Bay Company's post, well headed out, the ears large and full and quite fit for table use. As no frost was experienced until September 29, there would be time for the ears to

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ripen. From the time the records were begun, on the nineteenth of June, until the night of September 29, when the thermometer fell to 26° , there was no frost that affected even tender vegetation.

On the night of August 10, the temperature fell to freezing point, but did not get low enough to do damage, at least in the valley of Grass river, though some of the potato vines on the summit of the high ridge north of the Pas were slightly touched.

The Indian, never a very enthusiastic agriculturist, succeeds everywhere in getting good crops of potatoes, and at the homestead of an old settler named George Cowan, on Cormorant lake, an exceptionally good yield of very large potatoes was being dug in September.

Though the past season was probably, owing to its dryness, a little warmer than the average in Canada generally, yet the subjoined record of temperatures seems to indicate that this district is not at all too cold for general agricultural operations. The longer daily duration of sunlight in these high latitudes must be taken into consideration, and for purposes of comparison with more southerly localities yearly averages of temperature are of no value. A region lying in a higher latitude, though showing a lower yearly average temperature, may, during the growing months, owing to its longer hours of sunshine, have quite as good an average.

A reference to the subjoined table will show that in the district under consideration the temperature keeps up exceedingly well until late in the afternoon. It will be seen that during July the temperature at 6 o'clock p.m. was equal to or higher than the noon temperature on fifteen days, during August on nine days, and during September on eight days, and that the 6 p.m. averages for these months were lower than the noon averages by only 1° , $1\frac{1}{2}^{\circ}$ and 2° , respectively.

A comparison with the records of temperature kept in previous years under exactly similar conditions, in slightly lower latitudes, farther east, seems to show that this western country is conspicuously warmer than the same latitudes 400 miles farther east, though the altitudes differ very little.

SUMMARY OF TEMPERATURES.*

	6.30 A.M.	Noon.	6 P.M.	Mean Max.	Max.	Mean Min.	Max.	Min.	Monthly Mean.
July.....	58.5	73	72	76	.....	53	84	40	64.5
August.....	54.5	70	68.5	75	...	50	91	32	63.5
September.....	48.5	59.5	57.5	64	...	44.5	76	26	54.3

The maximum temperatures in the above table are undoubtedly too low as it was not possible, owing to the mode of travel to keep a maximum thermometer continually set up, and the figures in the maximum column are merely the highest recorded at the time of observation. The July minimum in the summary is estimated and is probably low also. The instruments used were 10-inch maximum and minimum thermometers, United States weather bureau patterns. The instruments were set up under shade about three feet above the ground.

* It has not been considered necessary to publish in detail the record of daily temperature observations made by Mr McInnes during the exploration.

ON EXPLORATIONS ALONG THE PROPOSED ROUTE OF THE CANADIAN
NORTHERN RAILWAY, BETWEEN SPLIT LAKE AND
FORT CHURCHILL.

Owen O'Sullivan.

In accordance with instructions to survey and explore the country lying between Split lake and Fort Churchill, on Hudson bay, along the probable line of the Canadian Northern railway, I left Ottawa on June 7. for Winnipeg, where I procured supplies and outfit for the expedition.

At Warfen landing, on June 15, four men were engaged, and we went down the east branch of the Nelson river via Norway House, engaging two more guides there, and with three canoes reached Split lake on July 3.

Parts of the route followed have been reported upon by Dr. Robert Bell and Mr. J. B. Tyrrell.

In the undulating country around Split lake the rocks are gneiss and granite, covered with good clay soil with occasional swamps; the trees, chiefly black spruce, are from four to ten inches in diameter.

On leaving Split lake we made a portage at the head of a bay three miles long by half a mile wide, lying in a northerly direction from the Hudson's Bay Company's post. This portage, which is one mile and three quarters long, lies mostly through swamp and leads to the shore of a small lake forty feet above the level of Split lake. We followed its outlet through a low swampy country to Assean lake, a total distance of two and a half miles in a northerly direction. In this last there are two narrow clay ridges running east and west, having an elevation of fifteen feet above the water.

Assean lake, which lies east and west, is about twelve miles long, and has an average width of a mile. Its shores, generally rocky, mostly gneiss, are well wooded with black spruce, tamarack and white birch. A fire that occurred two years ago ran from its southeastern end for several miles eastward.

The Ouatawi river, entering Assean lake at its eastern extremity, is small and crooked. We followed it to Ouatawi lake, a distance of about fourteen miles on a north course. This lake is about three miles long by half a mile wide. Grey granite with foliated mica schist occurs on the west shore at one mile from the outlet.

From this point we made five portages and crossed four lakes, the largest one a mile and a half in length, and reached a bay of Waskaiowaka lake, a total distance of about six miles in a straight line in a northerly course. No rock exposures were noticed in this last stretch. The country is generally low and swampy up to the last two portages, into Waskaiowaka lake (called Big lake by the natives), where hills of clay running east and west rise to thirty feet above the level of the lake.

The canoe route from the last portage follows the eastern shore of Waskaiowaka lake for six miles in a northerly direction to its outlet, called the Little Churchill.

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Waskaiowaka lake is about sixteen miles long. It has two expansions, the one on the south being about ten miles in length by five miles in breadth. A short narrows connects it with the northern expansion, which is about six miles long by four wide. The rock is generally gneiss and granite; clayey hills rising to fifty or sixty feet above the level of the lake form the southern shore of the northern expansion.

Three miles south of the outlet, on the east shore, steep banks occur, covered with ten feet of mossy peat. The forest growth is chiefly black spruce and white birch of from four to fourteen inches in diameter.

Starting down the Little Churchill we traversed a swampy country for four miles. Here the river expands, forming a lake two miles long and one and a quarter wide. On the east side, near the outlet of this expansion, a hill of drift covered mostly with black spruce averaging eight inches in diameter rises for two hundred feet above the level of the water.

Three miles farther down, the Beaver river, one chain wide, comes in from the northwest, and one mile below it the first portage was made, passing to the left of a strong rapid giving a total fall of seventy feet in a distance of twenty-three chains.

For a distance of seven miles from here down the river only two portages were made, the longest one measuring twenty-four chains with a total fall of fifteen feet.

Half a mile below this last portage, a cross section of the river, taken on July 14 when the water was at medium summer level, gave a flow of 150,000 cubic feet per minute as the mean volume.

Six miles of swift current from this point brought us to comparatively still water, the river again spreading out and forming many expansions and islands, until Recluse lakes (called Was-kai-ow-a-ka by the natives) are reached, a total distance of forty-five miles from Waskaiowaka lake.

The country on both sides of the Little Churchill so far, is generally rocky or swampy, with black spruce, white birch and tamarack of small size. At the forty-second mile, the Switching river comes in from the west. This river has an approximate volume of 75,000 cubic feet per minute.

Beds of peat of from two to eight feet in thickness, overlying permanent ice, were noticed at several places in this last stretch.

On entering the Recluse lakes the east shore follows an expansion a mile and a half long by a mile and a quarter wide; then occurs a narrows a mile and a quarter long, leading to the northern part of the lake which runs east and west for four miles and has an average breadth of thirty chains. At the narrows the Hudson's Bay Company maintain a winter station, supplied by the Split Lake post.

From the forty-seventh mile, at the outlet of Recluse lake, we made two short portages and ran a strong rapid, giving a total fall of twenty feet, in a distance of half a mile. The last portage on the Little Churchill was made at a point two and a half miles below this rapid. From here the general course of the river, which is nearly due north, keeps a uniform width of about three chains with a swift smooth current to its junction with the Great Churchill, a total distance of 126 miles from Waskaiowaka lake.

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Gneiss and granite are seen in many places, particularly in the portages on the upper part of the river. There were no rock exposures seen below the last portage.

At eighty miles down, a good view of the country was obtained from the top of a clay hill, seventy-five feet above the river. From this hill, the Little Churchill could be seen running through a valley about six miles wide to the foot of morainic clay hills which rise to 300 feet above the river.

From this point northward the country, which has been overrun by a fire that occurred some forty years ago, is now partly covered with bunches of second-growth black spruce, tamarack and white birch.

In order to reach the headwaters of the Deer river we left the Great Churchill, three miles below its junction with the Little Churchill. Here we made a portage a mile and a quarter long in a due east course over a hill having an elevation of 300 feet above the river. This portage brought us to a lake half a mile in diameter with banks of peat of from three to seven feet in thickness overlying permanent ice.

From this lake another portage ninety chains in length over a peat bog was made to a lake a mile and a half long by half a mile wide. Then, by a third portage one mile long over a short and steep morainic hill 100 feet high, followed by a mossy black spruce swamp, we reached Deer lake, the headwaters of the Deer river.

Deer lake runs northwest and southeast; it is two miles long by half a mile wide, with low banks of moss. Morainic clay hills having an elevation of 300 feet above the lake are seen three miles to the northward. Lower morainic hills occur all along the upper part of the Deer river for thirty miles down from Deer lake.

The Deer river is 110 miles in length and runs in a northeasterly direction. It is very crooked, and its swift shallow waters occasion many rapids, which we often had to wade with our loaded canoes.

With the exception of a yellowish limestone in the bed of the river eighty-seven miles down from Deer lake, no outcrop of rock was noticed. The river from here down to the Great Churchill flows over limestone; numerous large fragments of limestone were seen all along, and with our paddles, we could feel the solid rock in many places at about three feet under water.

As already stated, the whole country has been overrun by fire. Bunches of spruce and tamarack that escaped the fires were frequently met close to the water's edge.

At sixty-two miles down from Deer lake we came to the open mossy plain which extends northward to the well-wooded banks of the Great Churchill.

The distance from the mouth of the Deer river to the Hudson's Bay Company's post called New Fort Churchill is twenty-two miles in a northerly direction. This part of the Great Churchill is two miles wide with a swift current to Mosquito point. Here the river narrows to one mile, forming a short swift rapid running into the shallow tidal lagoon at seven miles from the mouth of the river.

The post is situated on the west bank of the lagoon three miles from Mosquito point. The tide runs out for nearly a mile in front of the post, leaving a mud-flat strewn with numerous boulders, some having a diameter of seven feet. The lagoon,

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when full at high water is over two miles across from the Company's landing, but at low tide the river runs in a channel one mile broad, cut through sand and mud, to Churchill harbour.

Fort Churchill is the most southern harbour on the west coast of Hudson and James bays for ships drawing over twenty feet of water. It is nearly two miles long and from half a mile to three-quarters of a mile wide. Several soundings were taken and thirty feet of water was measured at low tide within 300 yards of high water mark on the west bank. Sand and gravel, with boulders, form the river bed.

The west bank of the lagoon and harbour, from Mosquito point to Old Fort Churchill or Prince of Wales, at the mouth of the river, is bare and rocky. Hills of quartzite rise to 100 feet above high tide. With the exception of a few square chains around Sloop cove, three miles up from the mouth of the river, the Hudson's Bay Company and Mission have taken nearly all the habitable ground on the west side. This consists of an old clay and sand beach about 800 yards long by 200 yards wide.

From Battery point at the mouth of the river on the east side and nearly opposite the Old Fort, the same quartzite runs eastward for several miles. At a mile and a half up from Battery point, the Hudson's Bay Company have a whaling station which is situated at the foot of the rocky ridge. From this point old beaches made up of clay, sand and gravel are seen at different levels running in a southeasterly direction, the highest attaining an elevation of fifty feet above the river. This side of the lagoon had a more inviting aspect than the opposite rocky, hilly shore.

There appear to be no great difficulties in securing a good line for the construction of a railway along the route followed between Split lake and Fort Churchill. The only part that might prove difficult lies between the lower part of the Little Churchill and the headwaters of the Deer river. Here morainic clay and sand hills rise from 50 to 300 feet, with many lakes, swamps and gullies between.

Wood is scarce at Churchill. The Hudson's Bay Company obtain their fuel supply from a ravine three miles distant, in a southwesterly direction, where black spruce, averaging five inches in diameter, is found.

The porpoise, or white whale, is very common in the mouth of the Churchill river. The Hudson's Bay Company in a few days captured sufficient to ensure oil and dog-feed through the coming winter.

Salmon, sea trout and whitefish are both plentiful and of excellent quality.

The barren ground caribou and deer herd in hundreds all over the country and are the staff of life for the people inhabiting this region.

Wild geese, ducks and ptarmigans breed all over the country and are generally very numerous, but this year a disease among the ducks reduced their number. I saw many of them dead at the edges of the lakes and ponds.

Our return trip was made via York Factory and up the Hayes and Fox rivers to Split lake, the Great Churchill and Deer rivers being too swift to ascend without great difficulty.

We left Fort Churchill on August 5 and arrived at Split lake on September 1, reaching Ottawa on September 27.

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ON SURVEYS ALONG THE NATIONAL TRANSCONTINENTAL RAILWAY
LOCATION BETWEEN LAKE NIPIGON AND LAC SEUL.*W. H. Collins.*

The past summer was spent in exploring the country lying for a distance of ten miles on either side of the N.T.R'y survey locations westward from Lake Nipigon. Our party of five in two canoes left Nipigon station on May 29, ascended the Nipigon river, crossed Lake Nipigon and proceeded up the Wabinoash canoe route as far as Rocky Island lake, where a cache for railway survey supplies has been established. Work commenced at this point on June 8, and continued until October 1, during which time a strip 125 miles long, extending from Caribou lake, north of Nipigon, to Dog lake on the Sturgeon river, was examined. Micrometer surveys of the lakes and rivers were made where required for mapping purposes, geological formations defined and attention given to the various resources of the region. The journey from Sturgeon lake out to Ignace at the end of the season was greatly facilitated by the kindness of Mr. McEwen, manager of the St. Anthony gold mine, who conveyed us the length of Sturgeon lake in his company's steamer. Two more days' canoeing brought us to the C.P.R'y at Osaquan siding.

Like the remainder of the Archæan peneplain, of which it forms part, this area possesses a surface of low relief and moderate altitude. Lake elevations from various points show that the general level does not vary greatly either within short distances or as a whole. Caribou lake at the east stands 1,149 feet above sea level. Dog lake on the west is 1,163 feet. Sturgeon lake midway between these is 1,327 feet, while Duck lake 1,382 feet, a headwater of one of the many Ogoki tributaries, represents the highest water level. Hills seldom reach 250 feet in height. From the top of one such the entire horizon line, distant from eight to fifteen miles, appears level, and the whole area enclosed undulating and forested. This description applies to the greater part of the area. However, in the vicinity of Lake Nipigon, diabases, overlying granites and gneisses, have through erosion, resulted in a rugged country characterized by precipitous hills 150 to 300 feet high and deep-set lakes and streams. Again, near Sturgeon and Savant lakes, the steep-tilted green schist formation has developed a very irregular surface forming alternations of high parallel ridges and valleys, the latter often containing long, narrow lakes.

The surface is practically one of solid rock, for rarely does the soil sheet become sufficiently thick to obscure or vary its appearance. An exception to this is found near Allan Water where glacial debris has been deposited in ridge-like hills 200 feet in height and composed entirely of coarse gravels and sands. Muskegs are never of great extent or depth.

Owing to the gentleness of the slope, scantiness of soils and impervious nature of the rock floor, an enormous amount of water, compared with the drainage volume, lies stored up in superficial depressions, thus giving rise to a territory plentifully

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supplied with lakes and admirably suited for canoe travel. These lakes are characterized by shallowness, irregularity of coast line and numerous islands. A large number of small creeks and brooks connect and drain them, which, although commonly of insignificant volume, are usually sluggish enough to provide good canoeing. The height of land crosses the area diagonally from northeast to southwest near the east end. The country on the south and east drains by the Wabinoish river into Lake Nipigon; all the remaining waters flow to Hudson Bay, Allan Water emptying north into Wabakimmug lake and thence to the Ogoki, and Sturgeon river, flowing westward into Lac Seul, are the only large streams. These rivers are strikingly similar in character being seldom river-like, but rather, strings of irregular lake expansions connected by short stretches of river in which are rapids and falls. Sedimentary materials with which to form a bed of uniform section and gradient are notably absent. Meandering, so typical of streams on soil covered regions, is seen only occasionally in swamps and muskegs.

GEOLOGY.

Rocks constituting the region are everywhere readily accessible for geological study and prospecting. They are easily separable into three groups whose characteristics are sufficiently distinct to make the division a good one for field guidance.

1. *Laurentian*.—A very large proportion of the territory in question consists of a complex intermixture of granitic and gneissic rocks occupying large continuous areas. In the field these are easily recognized by their distinctly crystalline texture, pale colours and richness in feldspars and quartz. They are by no means of one age or composition, but include granites, syenites, diorites, porphyries, &c., in all stages of gneissic modification. A biotite gneiss is especially common. The complex appears to be entirely igneous. Coarse granite dikes are of frequent occurrence, but fine-grained dikes of dark coloured material were not often seen, either in this formation or elsewhere.

A large area of these rocks occupies nearly the whole region between Sturgeon lake and Nipigon. On the east they disappear by degrees beneath a formation of diabase and sediments that encloses Lake Nipigon and extends pretty continuously for twenty-five miles to the west. To the north and south its boundaries were not found although exploration was conducted over forty-five miles in these directions. On the west it terminates within about four miles of Sturgeon lake and its edge is almost coincident with the eastern coast of Savant lake. Between these lakes, which lie in schists, a narrow isthmus of granite connects the area in question with another Laurentian area to the west. This second one extends from the middle of Sturgeon lake along the Sturgeon river to the first portage below Dog river, at which point Mr. McInnes* found Kewatin schists and conglomerate. Northward, it is bounded by a belt of these rocks extending parallel to and two miles south of Dog river.

Nothing of economic value was observed in the Laurentian formation. Fissuring and secondary vein filling is uncommon. The rocks themselves consist largely of quartz and silicates of little commercial interest. In the neighbourhood of Wabakimmug and Smooth Rock Island lakes, very coarse granites are abundant, consisting of quartz and feldspars in large crystals, and, less frequently, muscovite. The last named

* Geol. Surv. of Canada, Summary Rep., 1902, pp. 206-211.

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mineral was seen in flakes of more than two inches square. Along Allan Water, south of the survey lines, a good many coarse textured dikes contain magnetite in large crystals, but not in valuable quantities.

II. *Keeweenawan*.—The Lake Nipigon basin and vicinity contains a series of flat lying dolomites, sandstones, &c., and great sheets of diabase, ascribed to this geological period. These rocks, especially the diabase, formerly extended almost to Sturgeon lake but are now found only vestigially over the intervening region. The soft sedimentary members outcrop along the Wabinoish river, beneath a diabase covering, but either did not extend farther west or have been entirely removed. The diabase, being more resistant, remains, and can be readily located from observation of topographical features. Nearly all the higher hills and ridges for fifty miles west and northwest of Nipigon are capped by this rock, which thus forms isolated patches or islands among the Laurentian. The hills so covered have precipitous sides, weather stained a red colour, and are fringed at the base by a heavy talus of angular fragments. Patches of this sort were observed, among other places, at Caribou, Granite and Eagle lakes.

Beyond presenting considerable engineering difficulties to the construction of the railway, the diabases do not appear to be of commercial interest.

III. *Keewatin*.—This group of highly altered sediments and igneous rocks is readily distinguished in the field from either of the preceding groups. It consists typically of highly fissile, fine-grained schists dipping at high angles and forming more or less elongated belts. The most characteristic members are dark green sericite and chlorite schists plentifully impregnated with pyrite. These are in various conditions of alteration, being sometimes found merging directly into porphyries and other fine-grained eruptives. Cherts, jaspilite, conglomerate and slate-like schists are undoubtedly sedimentary, consequently the formation is partly sedimentary, partly igneous in nature.

These form the 'mineral belts' of the prospector and, indeed, are the rocks of greatest economic interest. Quartz in veins, stringers and lenses is plentiful, and in the schists themselves can be found abundant evidence of secondary mineral formation. The contact of such belts with the Laurentian is usually marked by black hornblende schists, and a micaceous schist, either in bands or as masses of all sizes contained within the gneisses. The presence of such inclusions in the Laurentian is a fairly reliable indication of the proximity of Keewatin green schists.

Three such belts occur in the explored area :

Caribou Lake.—About the middle of Caribou lake micaceous and hornblende schists appear and are followed to the north and east by green schists and associated rocks that extend beyond the eastern extremity of the lake. Their extent was not determined but probably they connect with a large area of the same age lying farther east. These schists dip about 45° south and strike W.S.W.

Sturgeon Lake.—The northern end of Sturgeon lake lies partly within Keewatin schists. On the west, these are sharply terminated by Laurentian gneiss and more

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recent quartz porphyry and porphyrites, the contact and the ordinary green schists lying almost vertically. Eastward these give place to less altered eruptives, quartzites, hornblende schist and, finally at Sassaganaga lake, pass through hornblende and mica schists into the Laurentian. On the north they extend to within a short distance of the N. T. Ry. location, beyond which the Laurentian again appears. Among the various intrusive masses found in this belt, a coarse syenite occurring on what is locally known as the Nipigon route is especially interesting.

Savant Lake and Dog River.—An area of the same character as the preceding encloses Savant lake and extends northward and westward. On the south it is almost continuous with the Sturgeon Lake area, being separated by only a mile or so of Laurentian, in which scattered bodies of green schist are included, suggesting an original continuity interrupted at the time of the granite intrusion. Savant lake lies entirely within these schists, its eastern coast, however, being their approximate limit. Northward their extent has not yet been determined but to the west they can be followed continuously along Dog river to within eight miles of its mouth, the course of the stream being largely determined by their foliation. Their junction with the Laurentian to the south forms a line parallel to Dog river and from one to two miles away. The northern boundary was not found. Green schists of various sorts make up a large share of the formation; some of these show vestiges of an original porphyritic structure. In addition are cherts, conglomerate and jaspilites comparable with similar rocks of the Canadian and Minnesota iron ranges. These lie at steep angles and run approximately northeast and southwestward. More extended knowledge of these and neighbouring rocks to the north may show some of them to be of later age than here indicated but, provisionally, they are all included in the Keewatin.

MINERAL DEPOSITS IN THE KEEWATIN.

Iron.—Deposits of magnetite which may prove valuable were found in the Dog River area. Along the south shore of Kashawegama lake the rocks are chiefly green schists, with lesser amounts of siliceous bands. All dip nearly perpendicularly and extend in a direction of 230° to 240° or about southwest. Interlaminated with them are bands of magnetite varying from an inch to one or two feet in width and occurring at intervals—across the strike—of from a few inches to several feet. The magnetite bands are either almost pure or, in places, mixed with siliceous matter. This surface condition seems continuous for a distance of 1,000 feet or more across the strike and extends for about six miles along it, from the middle of Kashawegama eastward to within a short distance of Savant lake, beyond which the ore bands become diffused. Westward from the centre of Kashawegama no magnetic disturbance was observed in crossing the entire formation so that mineralization probably ends abruptly.

Examination of the formation in a north and south direction where the magnetite occurs was not conducted for any distance. To the south of the lake green schists seem continuous to the Laurentian contact, distant a couple of miles. On the north there is a conglomerate of Archæan pebbles in a green schist matrix, pale coloured sericite schist and jaspilite, the extent being unknown.

This formation appears identical with those of the Temagami, Boston tp., and Vermilion iron ranges, and, besides being of possible commercial importance, is of in-

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terest as a further link in the chain of iron formations that are being found to extend from Lake Temagami to Minnesota. Magnetic disturbance indicates that it continues northeastward under the waters of Savant, but probably east of that lake it is terminated at the Laurentian contact. Yet on Caribou lake magnetite is present in similar rocks that lie in such a position as to suggest original continuity with those of Savant. In the northeastern bay of the former lake in Keewatin green schists, a ten-foot band of the schists is sufficiently impregnated with magnetite to produce local compass variation. This band dips steeply and extends in a direction of 250 degrees.

A detailed investigation of the geology of Kashawegama lake would be necessary to trace out and measure the outcropping ore seams and to foresee the likelihood of large underground accumulations of ore. The area and the size of the outcrops seem large enough to warrant such investigation. Closer examination may reveal the presence of favourable intruded dikes or other igneous bodies and the occurrence of hematite. At present, however, only magnetite is known to occur.

Gold.—The Keewatin series is characteristically auriferous, but only in the neighbourhood of Sturgeon lake has it been exploited for that metal. The sericite and chlorite schists are nearly always pyritiferous, that mineral being of secondary formation and disseminated in small crystals through the schists. Secondary quartz in veins and irregular forms is equally typical of the series, and is especially abundant near Island lake and Dog river. When mineralized these quartz bodies contain much pyrite besides free gold and various sulphides.

So constant is this association of green schists, pyrite, free gold and quartz that a chemical relationship probably unites them. The pyrite of the quartz veins is found upon assaying to be gold-bearing, and Mr. McEwan, of the St. Anthony mine, states that pyritiferous blocks of green schist found enclosed in quartz prove as valuable as the vein stuff itself. The pyrite is in all likelihood a secondary product of the alteration that has produced the green schists. But whether or no the gold is thus to be traced directly back to the igneous rocks that now exist as sericite and chlorite schists, it is of importance to the prospector that the green schists are favourable prospecting grounds, and the presence of sulphides equally satisfactory.

At Sturgeon lake the minerals found are gold, pyrite, chalcopyrite, stibnite, galena and zinc blende in quartz, or sometimes quartz and calcite. Galena and zinc blende are regarded with especial favour by the miners. The veins do not appear to conform with any geological structure, but run in various directions, and are generally much ramified and irregular. They occur both in the schists and in adjacent igneous masses. In fact, so abundant are the igneous rocks that nearly all the properties visited may be said to be at the contact of the Keewatin with an igneous intrusion. Probably the latter have been instrumental in the process of mineralization, and the presence of such in other districts may prove favourable prospecting indications. Where veins are observed entering igneous rocks from the schists they are very much broken and scattered to form a cement reuniting shattered blocks of the igneous body.

As a mining region not much has been done yet, and little is known of its underground nature. The St. Anthony mine, opened in 1903, has been worked continu-

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ously, and is at present considered a profitable proposition. A force of forty men is employed, and the quartz is crushed in a ten-stamp mill. The free gold is removed by amalgamation, but as yet nothing is done with the pyrite concentrates, although these yield good assay values. Underground working has proceeded to a depth of 100 feet, at which depth the supply of vein stuff and its contents remains pretty constant. Access is obtained by two shafts; a third has been converted into an open cut forty feet in width extending to the shore of Coutour lake.

At Belmon bay, near the northwest of Sturgeon lake, the Belmon Bay Gold Mining Company, which a couple of years ago sank and afterwards abandoned a shaft 250 feet deep, is recommencing operations on a four-foot vein, and in anticipation of good results is now busy erecting a three-stamp mill. In close proximity many claims have been located.

Just north of the narrows, on a small island, a property has been claimed by Mr. Bernard. It resembles the St. Anthony in position, being at the contact of the Keewatin and a porphyrite granite, and shows much free gold.

A number of other prospects, not visited, are reported equally good.

Silver.—A small specimen of native silver was taken from a quartz vein in Island lake. Assays of the Sturgeon Lake materials and the results of prospecting have not aroused any enthusiasm over the silver outlook for the region, yet the results may indicate the presence of larger quantities.

OTHER RESOURCES.

Soils.—Loose deposits of considerable depth are all of glacial origin, and consist of sand and coarse gravel, not forming a large sheet but locally aggregated into hills and ridges. An area so covered occurs near Allan Water, the hills rising to 200 feet, but the materials are coarse and not valuable for agricultural purposes. South of Smooth Rock Island lake is a considerable extent of light, sandy loam; elsewhere soils are thin, and collected into natural depressions of the rock surface. These patches are quite fertile, containing much carbonaceous matter from the decomposition of forest growth and inorganic salts from the ashes of forest fires. The thinness and proportion of inflammable materials are well illustrated after a forest fire by the extent of rock uncovered. Generally speaking, the agricultural possibilities of the region steadily improve as one proceeds westward. Small patches of good soil are obtainable near Sturgeon lake, while portions of the Dog River valley contain excellent clay land.

Although the smaller streams and lakes remained ice-covered until May 6, this year, garden stuffs were successfully grown and harvested before the severe frosts. At Sturgeon lake Mr. Seaton raised a crop of 800 bushels of excellent potatoes as well as other vegetables, even tomatoes being ripened.

Timber is dependent upon soil supply and drainage. Although much of the forest is small and the growth slow, where the soil is deep and dry, poplar, birch, tamarack, spruce and pine attain diameters of 15 to 24 inches. In wet land and muskeg where, even in August, the frost persists at a foot or so beneath the surface, the same trees reach thicknesses of only 6 or 8 inches, although showing 100 to 150 annual rings

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of growth. As with the agricultural possibilities, the timber improves in size and character, westward. East of Allan Water jackpine and spruce predominate, with a small proportion of deciduous growth. White and red pines were first met at Allan Water, where the former was found sparingly along the gravel ridges; it attains thicknesses of 1 to 2 feet. White pine was noticed on Sturgeon lake, but not in quantity. Cedars near Island lake grow to 2 feet diameter, but not tall, and they are restricted to low ground and lake shores.

In recent years much of the country east of Allan Water has been burned over.

Good water-power is available on all the larger streams. On Allan Water near the proposed railway crossing is a fall of 22 feet; at this point the river flows through two narrow channels enclosing a high rocky island, the main shores also being high. Sturgeon river has numerous rapids and falls. Dog river near its mouth and only about a mile from the railway route falls about 20 feet. The best timber observed grows in this neighbourhood.

COBALT DISTRICT AND NORTHWARD.

Dr. Robert Bell.

After my return from leave of absence, in August, I visited the Cobalt mining district, and again in the end of October and beginning of November. I found that conditions had improved considerably since my inspection of the district in April of this year. There was a general feeling of confidence in the probable duration of mining. Many prospects were being worked and the rate of production of silver had greatly increased.

The proved argentiferous area of the district has been extended, especially towards the northeast, by the discovery of new prospects and by the testing of indications which had been known to exist. The silver-bearing district was supposed to comprise about 15 square miles, but the actual productive area is confined to about 12 square miles. It has an elliptical or rather pear-shaped outline and measures $5\frac{1}{2}$ miles from southwest to northeast, by about 3 miles in its greatest width, the larger end being near the southwest extremity of Giroux lake, and the centre at Peterson lake. Beyond these limits some of the metalliferous minerals associated with the silver, such as smaltite, continue to be found, but with little or none of the precious metal.

The question as to the depth to which the silver may be expected to hold out is one of great importance. The leading practical demonstration is still that of the Larose mine, where a depth of 300 feet has been attained with good ore all the way. It was said that a bore-hole had been made by the diamond drill for a considerable additional depth with the same result, but I could not verify this. The depth to which silver or its ores may extend in this district does not depend entirely on the thickness of the argentiferous agglomerate, as it is quite possible that the metal may follow planes below its base into the underlying rock.

A striking circumstance in reference to the silver of the Cobalt region is the fact that by far the greater part of it occurs in the native state, and also that much of it is in such heavy pieces, ranging from one ounce to half a ton, the larger masses being generally more or less mixed with vein-stuff and the ores of cobalt and nickel. Most of the masses are of flattened forms, while others are branching. All have exceedingly rugged surfaces, especially at the edges, so that one's hands become injured in attempting to lift large specimens without strong gloves. A considerable proportion of the metal is found as plates, sheets and leaves, filling up narrow fissures in the wall rocks. In these forms the silver is sometimes found passing evenly through the fragments of granite, &c., where the original cracks happen to traverse these fragments, as at the Trethewey mines. The native silver also occurs as grains and heavy scales, scattered thickly through calcite. At one of the openings on the Nipissing Company's property good specimens of both coarse and fine wire silver have lately been found.

At most of the workings the visitor is shown collections of 'nuggets,' each weighing from a few ounces to several pounds. At the University mine two masses

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were taken out, both of which consisted principally of bunches of metallic silver adhering together and filled in with calcite, each weighing about 100 pounds. A single mass was taken from one of the openings of the Nipissing Company, which, on being reduced, yielded forty-nine pounds of fine silver.

But the Larose mine has furnished more large masses of the precious metal than any other. Among them were single pieces of the following reported weights: In 1904, an aggregate of masses of metallic silver, connected together by nocks, which require to be cut by cold chisels for convenience in handling, was estimated to weigh 700 pounds. One mass, found in 1905, at the outcrop of the veins, and purchased by this Survey, weighs 258 pounds. The drillings from five holes bored at equal distances apart through this mass showed an average of 18 per cent of silver, the balance being smaltite, niccolite and some calcite. A mass found in 1906, partly calcite, is reported to have weighed 640 pounds, and two other similar masses, 250 and over 500 pounds, respectively. Another weighing about 350 pounds was nearly solid silver. A thick slab from a transverse vein on top of the hill a short distance southwestward from the Larose shaft-house, consisted of about equal bulks of gangue and metallic silver.

Besides the native metal, most of the naturally occurring compounds of silver are found in smaller quantity through the district, with the exception of the chloride which appears to be absent. From the opening called Number 19 of the Nipissing Company's property, a notable quantity of argentite has been extracted. A few of the larger single pieces of the pure mineral would be from half a pound to a pound in weight.

On the 22nd of August, during my visit to Lot R. L. 404 of the Nipissing Company's property, a vein was discovered by trenching which has proved to be the most important one so far known to exist on this company's land. It is situated in the southeast quarter of the above lot and a section of it runs from a foot to three feet in width and contains about half its weight in native silver.

Mr. W. H. Linney, manager of the Nipissing Mining Company, had put into practice, on the sloping ground of the northwest side of Peterson lake, an improvement on the old method of costeening the surface-covering for the discovery of outcrops. This consists in washing off the whole of the covering by strong hydraulic jets, forced up by means of a power plant on the edge of the lake. Although the boulders and the larger stumps of trees are left behind these do not prevent a sufficiently continuous view of the rock-surface being obtained. This process is cheaper and more complete than trenching.

The Gillies timber limit was visited in August in company with Professor Nicol, who, in the absence of Professor Miller, was in charge of the explorations that were being made there for the Ontario government. It was again visited in the beginning of November. In the northern part of the limit, with the exception of a few outcroppings of rock, the surface is covered by a sheet of stony earth of glacial origin, which renders prospecting slow, difficult and expensive.

A vein of calcite and smaltite with some silver was found under three or four feet of earth, at a point about 500 feet west of the intersection of the eastern line of

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Gillies limit and the northwest side of Cart lake. The outcrop of the vein in the trench was hidden by the fresh earth lying upon it, but judging from the specimens shown me, it would appear to be four or five inches wide. A shaft, to a depth of fifty feet, by the beginning of November, has been sunk in the country rock. It is said that a vein, or an indication of one, had been previously discovered inside of the north angle of the limit, about five or six hundred yards southwest of Little mine, near the southwest corner of Lot R. L. 404, but I could not verify this statement.

THE COUNTRY NORTH OF LAKE TIMISKAMING.

In the month of October I followed the line of the Timiskaming railway from Cobalt to a point on the north side of the township of Otto (a few miles beyond the permanent camp called Boston Headquarters, or a distance of sixty miles north of Cobalt), for the purpose of gaining information as to the geological and general nature of the country traversed. Excepting in the last fifteen miles examined, no crystalline rocks occur near the railway line. The country is level and underlain by stratified grey, drab and blue clays of an unctuous character. Owing to the level nature of the country with only the drainage afforded by the natural water courses, this clay is always wet and prone to move whenever its equilibrium is disturbed by the cuts and fills made in constructing the railway. The cuttings already made have become partly refilled by the sliding in of the clay. Similarly the embankments occasionally subside, their weight at the same time heaving up some part of the surface close by.

The timber along the route of the railway consists of the species commonly found in the same latitude. North of Englehart, at the second crossing of the Blanche river, the trees are mostly of small size, belonging to second growths after forest fires and are of no great age.

The soil is good, but being clayey with a level surface, it is too wet in many parts for cultivation without artificial drainage.

THE REGION ABOUT BANCROFT.

A visit was paid in August to this region in connexion with the correlation of certain rocks in Canada, with others in the United States, for the purpose of a uniform and harmonious representation of the geology of both countries.

ON THE QUEBEC SIDE OF LAKE TIMISKAMING.

A. E. Barlow.

The field work of the past season was confined to the area in the immediate vicinity of Lake Timiskaming on the Quebec side with the object of tracing eastward into this province those geological formations, which to the west in Ontario, contain the silver-cobalt-nickel ores. It had previously been shown that precisely similar rocks did occur in this area between Lake Timiskaming and Lac des Quinze* but it was felt that another attempt should be made to trace in more detail than was previously possible the various geological boundaries so as to permit of the mapping of this area on a scale of one mile to an inch.

For this purpose a detailed geological examination was made of the district contained in the townships of Guigues, Baby, Duhamel, Laverlochere and Fabre as well as of a portion of the unsurveyed region lying immediately to the east of these townships. I was assisted in the geological part of the work by Mr. Morley E. Wilson of Toronto University while a large part of the topographical surveys were undertaken by Messrs. Douglas Ellis and P. W. Racey. Mr. R. Graham, Demonstrator in Mineralogy at McGill University and Mr. Daru, of India, were also attached to my party with instructions to make a study of the minerals of the cobalt veins. Owing to my absence from this field during July, as the Geological Survey representative on the International Geological Correlation Commission, and in August on leave of absence, I was unable to give any large amount of personal attention to this field, so that most of the work devolved upon my assistants, and the map shortly to be issued will be based very largely on their labours.

PHYSICAL FEATURES.

The eastern or Quebec side of Lake Timiskaming presents many deep and important indentations or bays, the bottoms of which are usually bordered with small clay flats. These bays are separated from one another by rocky headlands although the shore lines are not so abrupt and rugged as on the Ontario side. From Fabre wharf to Chief island the whole area in the immediate vicinity of the lake shows a rapid succession of steep rocky hills with small intervening clay flats. These features characterize a strip of country about three miles in width, stretching from the village of Ville Marie to the mouth of Apika creek. Farther inland large and extensive clay flats have been cleared which are at present occupied by a contented and prosperous farming community, the soil being good and yielding abundant crops. Such arable tracts are particularly extensive through the middle and northern portions of Guigues and Duhamel extending northeast into the northern part of Laverlochere and the southern portion of Baby. Numerous roads have been opened up, mainly on the concession and

* Report Geo. Surv., Can., Part I. Vol. X, 1897.

lot lines. One of the oldest and best travelled roads is that which extends from Ville Marie, the chief settlement and place of business, to the southern bay of Lac des Quinze, while still another important road connects this same village with North Timiskaming on the Rivière des Quinze.

The principal stream is the Otter (sometimes called the Ottertail) river, which, with its two small tributaries, the Cameron and Duford, drains most of the area lying within the townships of Guigues, Baby, Duhamel and Laverlochere. The Little river carries off the surface water from a much smaller district in the southern part of Duhamel and Laverlochere, while Lafricain and Lavallee creeks furnish the drainage to Fabre township. These streams for the most part, and especially the Otter, pursue a very tortuous course through the clay flats, showing high banks of stratified clay.

The largest lakes are known as Cameron and Sassaganaga, but with the exception of a portion of Baby and Laverlochere townships lakes are of comparatively rare occurrence.

Micrometer and compass surveys were made of all the roads as well as the streams and lakes included in this area.

The geological succession as recognized by our examination is as follows, with the several equivalents as studied on the Ontario side of the lake.

QUEBEC.

Pleistocene—

Clays and sands.

Silurian—

Clinton and Niagara.

(Limestones, shales, conglomerate and sandstone.)

Great unconformity.

PRE-CAMBRIAN.

1. Upper Huronian—

Quartzite and conglomerate.

No apparent conformity.

2. Lower Huronian —

Conglomerate, breccia and slates.

No deposits of economic importance yet found.

Great unconformity.

3. Keewatin—

Igneous complex, with some minor beds of altered quartzite, chiefly greenstones, quartz porphyries and porphyrites, much folded and disturbed.

Promising deposits of chalcopryrite, galena and other sulphides with low values in gold and silver.

ONTARIO.

Pleistocene—

Clays and sands.

Silurian—

Clinton and Niagara.

(Limestones, sandstones and conglomerates.)

Great unconformity.

PRE-CAMBRIAN.

1. Middle Huronian—

Lorraine arkose quartzite and conglomerate.

Unconformity (Miller).

2. Lower Huronian—

Conglomerates, breccias, quartzite and greywacke slates.

The cobalt-nickel-arsenic silver veins occur in this series.

Great unconformity.

3. Keewatin—

Igneous complex, mainly greenstones and quartz porphyries more or less folded and disturbed.

Occasionally some of the silver-bearing veins extend downward into this formation, but as a rule these high grade ores are replaced by chalcopryrite, galena, zinc blende and pyrrhotite in their downward extensions through these rocks.

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IGNEOUS.

1. Post Huronian—
Diabase.
2. Post Keewatin—
Granite (Laurentian).
This granite is intrusive into the Keewatin, but furnishes pebbles to the Lower Huronian conglomerates.

IGNEOUS.

1. Post Huronian—
Diabase.
2. Post Keewatin—
Lorraine granite (Laurentian).
This granite is intrusive into the Keewatin, but not into the Lower Huronian.

It will, therefore, be seen from the foregoing table of formations that the two areas are from a geological point of view practically identical, while, however, exposures of slate and conglomerate on the Ontario side cover extensive tracts which are for the most part well exposed and comparatively free from drift, areas of a similar strata on the Quebec side are covered by a heavy mantle of clay, often continuous for miles with only occasional and comparatively small outcrops of the underlying rocks. By far the largest part of the district shows outcrops of quartzite, granite and green schists with few or small deposits of economically valuable minerals.

CLAYS AND SANDS.

The Pleistocene history of this and adjacent regions seems to be in the main divisible into two parts. (1) That of great accumulation of snow and the production and maintenance of a confluent ice sheet. This is believed to have been accompanied by a vast regional uplift, increasing in amount to the northwest. Following this came (2), a profound submergence, during which time the ocean invaded a large portion of the Ottawa valley rivalling in extent and depth similar encroachments made by the sea during portions of the Palaeozoic. It is very probable that during this period channels may have connected that portion of the ocean covering the St. Lawrence and Ottawa valleys with that existent in Hudson bay. The stratified clays which towards Lac des Quinze pass upwards into sand were probably deposited very rapidly from streams issuing from the margin or front of the retreating glacier. These extensive clay flats often occur as terraces thus serving as marks accentuating the various stages or haltings in the ice sheet of which the margin was buried beneath the rising waters, thus permitting and even favouring such a mode of deposition of the englacial detritus. These great clay plains cover very large areas throughout this district, often partially or completely separated from one another by rough rocky hills that rise abruptly from the plains. While very useful from an agricultural standpoint, they have a most depressing effect on the eager geologist and prospector.

SILURIAN.

CLINTON AND NIAGARA.

The eastern edge of this Silurian outlier which occurs in the form of a synclinal trough may still be seen extending almost continuously along the shores of Lake Timiskaming from Chief island to Piché point with smaller patches as far south as opposite Bryson island. This narrow fringe is made up of conglomerates and sandstones lying at the base of the Niagara formation. The coarse beds are a boulder conglomerate, representing simply a talus of angular and subangular fragments, detached from the elevations in the immediate vicinity of the exposures, consolidated together by a finer grained arenaceous cement of a yellowish colour in which are also embedded

fragments of corals and orthoceratites. This boulder conglomerate passes upward into a fine conglomerate, in turn replaced by a coarse grit, and becoming finally a yellowish rather friable sandstone.

In the bay to the south of Piché point and between this and the Wright mine there are two small patches of thinly bedded light yellow arenaceous limestone dipping in a southerly or southwesterly direction 5° , while immediately south of the Wright mine is another small patch of similar limestone dipping southwest 9° .

On the same shore nearly opposite Bryson island there are two more small patches of the arenaceous limestone exposed at the shore wrapping round the hummocks of Huronian quartzite and dipping in a southeast or southwesterly direction 5° . None of these contained any visible fossil remains.

On Burnt or Mann island, as also on the two smaller islands between this and Bryson island, (Osler and Brisseau islands) are exposed the limestones and shales representing the deepwater deposits of this period. The limestone is of a pale yellow to cream colour, weathering whitish, the beds varying in thickness from a few inches to as many feet. Some of the beds are of a very fine and even texture, very closely approaching the character of lithographic stone.

PRE-CAMBRIAN.

UPPER HURONIAN.—QUARTZITE AND QUARTZITE-CONGLOMERATE.

This topmost member of the Huronian in the Timiskaming district is much more extensively developed on the Quebec side. It is the geological equivalent of what Professor Miller has called the Lorraine arkose of the Ontario side of the lake. This rock passes upward by an insensible, though sometimes rapid, gradation from a slaty greywacke, which in turn gives place gradually downward to a basal conglomerate.

Sometimes this quartzite rests directly and unconformably upon a granite, the slate and conglomerate being entirely absent. The conglomerate, at the base made up largely of granite pebbles and boulders, is well seen at various localities near the centre of the township of Duhamel. At Wine point and in the vicinity of Ville Marie this same quartzite is plainly seen to result in the breaking down of the granite 'in situ.' It is usually in very massive, often much jointed beds, coarse in texture, in most cases showing the character of a grit, while certain bands are conglomeratic. Many of the larger fragments in the conglomeratic phase represent very distinctly rounded or waterworn pebbles, the largest of which vary from an inch to two inches in diameter. These are composed of a greyish white translucent, often much fractured quartz and many of them are surrounded by a thin film of iron oxide. Occasionally some pebbles of red quartz are present, while still more rarely greenish, greyish and pale brownish chalcedony-like fragments occur. In addition there are often small angular fragments of both red and yellow jasper, together with small pieces of both reddish and greyish feldspar. These jasper fragments are evidently derived from the iron ore formations of the underlying Keewatin, small bands of which are known to occur to the southeast of Laverlochere, and also crossing the Quinze river on the tenth portage from Lake Timiskaming. The large fragments are embedded in a matrix composed largely of yellowish green sericite which, on account of its abundance, gives the prevailing 'sea' green tint to the whole rock. This quartzite

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may be well examined and studied in the stretch of country about three miles in width extending from the mouth of the Little river to the mouth of Apika creek. It also makes up the larger part of Bryson and Chief islands. As on the Ontario side no deposits of minerals of economic importance have been noticed in this formation.

LOWER HURONIAN.

SLATE AND CONGLOMERATE.

The conglomerate which occurs at the base of the Huronian rests unconformably upon either a granite or the upturned edges of the Keewatin greenstones and schists. This conglomerate is the rock referred to by the earlier geologists, Logan and Murray, in their first geological descriptions as 'slate conglomerate' and 'chlorite slate conglomerate.' Both as a massive rock and in its more imperfect forms of slaty structure, it exhibits the character of a conglomerate or breccia, carrying fragments chiefly of various eruptive rocks, which vary in size from the smallest pebble to boulders which are sometimes several feet in diameter. The largest and most abundant are of the underlying flesh red biotite and hornblende granite and fine grained red quartzite, but pebbles of diabase, diorite, porphyrite and green schist are also abundant. The finer grained matrix, usually dark green in colour, is made up chiefly of chlorite and sericite in which are embodied small fragments of quartz, orthoclase, plagioclase and occasional microcline. Wherever any considerable section is exposed, this conglomerate passes upward into a slate by a gradual decrease in the number and size of the pebbles. Over large areas, however, the upper beds cannot be said to be true slates since pebbles are of very common occurrence. Some of the slates are very evenly and beautifully banded in varying shades of green or brown. The whole of the beds of the Huronian in contradistinction to the underlying Keewatin are in approximately horizontal position, but the strike and dip are constantly varying. In this district the various members of the Huronian occur in a series of low domes resting unconformably upon the granite or upturned edges of the Keewatin schists. They seem to be in perfect conformity with one another, the conglomerate, slate and quartzite showing a rather perfect, though at times rapid, gradation.

KEEWATIN.

These deep green, often schistose, rocks are the oldest in the district, being cut through by the granites and gneisses usually classified as Laurentian. The largest area occurs in the southeastern part of Baby and thence north to Cameron and Long lakes, forming a belt from three to six miles in width and extending northwest across the Quinze river. The whole series as here exposed is a highly bedded and metamorphosed complex of several varieties of porphyry and porphyrite, diabase, and green schists with subordinate bands of iron formation and quartzite. Some of these schists contain promising deposits of chalcopyrite, galena, &c., which have attracted the attention of prospectors and mining men. Some of these deposits in the township of Fabre were being developed during the past summer. Besides these deposits of sulphides, quartz veins carrying gold also occur, but whether in sufficient quantity has not been demonstrated.

POST HURONIAN.

DIABASE.

The equivalent of the diabase with which silver has been found on the Ontario side is well exposed in the vicinity of Quinn point, but so far nothing of economic importance has been discovered.

POST KEEWATIN.

GRANITE.

This granite which cuts the Keewatin and underlies the Huronian is well exposed in the northeastern portion of Duhamel and the northwestern part of Laverlochere. It is the rock from which the upper quartzite has been chiefly derived.

As a result of these examinations, it will be possible to issue a new geological map extending from the southern part of Fabre to the Quinze river, and eastward from Lake Timiskaming, a distance averaging about twelve miles. This will show in a very detailed manner all of the rock exposures, while at the same time the areas occupied by the clay flats will also be delimited.

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ON EXPLORATIONS ALONG THE PROPOSED LINE OF THE TRANSCONTINENTAL RAILWAY FROM LAKE ABITIBI, EASTWARD.

W. J. Wilson.

My work for the summer of 1906 was the examination, as far as time would allow, of a narrow tract of country along the proposed line of the Transcontinental railway from Makamik lake.

The most central point from which to carry on explorations seemed to be the Kenojevis cache on the Nawapitechin river, the northern branch of the Kenojevis. At this cache extra supplies were stored, and the Nawapitechin was ascended almost to its source, where an old Indian trail crosses the height-of-land to the Abitibi waters. This portage is over four miles long, and leads into Lake Lois, from which an easy canoe route extends to Makamik lake, where the Fly river enters. This river was examined as far as it could be ascended in canoes, and side trips were made to neighbouring hills. Another river, called the Kakameconan, which enters the lake about three-quarters of a mile south of Fly river, was surveyed and explored along the lower part of its course.

The same route was used to return to the Kenojevis cache, and side trips were made through the forest to the railway line. A special examination was next made of the molybdenite area on Kewagama lake, where Mr. J. F. E. Johnston found this mineral in 1901. Seals Home lake and the Harrieanaw river and some of its branches were then surveyed by compass and micrometer down to the northern border of the area to be examined, and also the Natagan, a branch of the Bell river. The last stream surveyed was the Upper Harrieanaw, of which a compass and micrometer survey was made for twenty-six miles east of Seals Home lake, and a track survey of the remainder up to the portage to Wabanoni lake, following the south branch. The railway line was followed the whole distance between Makamik lake and Bell river, and examinations were made north and south of the line at intervals between the various rivers, but owing to the character of the country this afforded very little information about the underlying rocks, as it sometimes happened that no exposures were seen for fifteen or twenty miles.

THE NAWAPITECHIN RIVER.

The Nawapitechin river to its junction with the branch from Kewagama lake flows in a southeasterly direction, and mostly parallels the height-of-land. It is about two chains wide for ten miles up from the forks, through low clay banks of rich sandy loam. The country is well wooded with spruce, poplar and fir, with Banksian pine on the more sandy tracts. There is also an abundance of the smaller shrubs. The land along this river is generally rolling and fairly well drained, so that there is a considerable area of good agricultural land on its banks. At about thirty-five miles from the forks, following the bends of the river, it again divides, one branch coming from

the north and the other from the southwest. The canoe route follows the southwest branch, which is reached by a portage three-quarters of a mile in length. This portage leaves the main river a short distance below the junction of the two branches, at a point where there is no obstruction, and as it was not marked on the map we had much trouble and delay in finding it. The brook above this portage is mostly dead water up to the long portage, the water being held back by beaver dams. The portage across the height of land is over four miles long, but is well cut out and level, and ends at a small stream flowing into Lake Lois. The route then follows Lake Lois and the river flowing out of its western end into Makamik lake. These waters have been described by Mr. J. F. E. Johnston.*

The Fly river enters Makamik lake on the east shore, and is about two chains wide at the mouth. It is navigable for canoes three miles above the forks at Owl mountain. It is very crooked, flowing through low banks composed of rich clay loam. The forest growth is good, and spruce of large size is seen along its course, especially on the lower part. Farther up, there are areas of sandy soil covered with Banksian pine. The Kakameonan river as far as followed was fairly good canoeing, and it has since been cut out to Robertson lake near the south exploration line of the Transcontinental railway. The character of the country and forest growth are the same as on the Fly river.

SEALS HOME LAKE AND HARRICANAW RIVER.

Seals Home lake is really composed of three expansions of the Harricanaw river, connected by narrows. The most southerly is the largest, being somewhat circular in form and over five and a half miles in diameter. Counting in the three expansions the total length, north to south, is twenty-four miles. There is no apparent current in this distance, and the level seems the same. Just below the third expansion Peter Brown creek enters from the east. This stream is 100 feet wide at the mouth, and forms a good canoe route almost to the railway line. There is a considerable amount of good agricultural land along this river, and an abundance of spruce and poplar, some of fair size. On the Harricanaw river, half a mile north of the railway line, the first rapid occurs and below this there are three small rapids with a fall of not more than ten feet in a distance of seven miles. Thirteen miles north of the line there is a lake expansion six miles long and a mile and a half wide. The river was surveyed below this lake for five and a half miles, and in this distance there are three small rapids close together, with a fall of seven feet. Some distance below the point at which I turned back the river is, according to the Indians, a continuous rapid for miles, and consequently is not used by them as a canoe route. For the most part the banks of the Harricanaw are low and composed of clay loam. The land in places rises gently for a short distance back from the river banks and then becomes level. From the lower lake several low hills were visible, rising from 200 feet to 500 feet above the lake. Small black ash were noted in various places along the river.

The Upper Harricanaw river east of Seals Home lake is broad, with little current, for the most part flowing through marshy banks. There are three small lakes

* Summary Report, Geol. Survey, 1901.

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above which the stream becomes smaller, and at a distance of six miles from the last lake divides into two equal parts. From this point to the portage to Wabanoni lake the stream is small, and is only navigable for canoes at fairly high water.

THE NATAGAGAN RIVER.

The Natagagan river is a branch of the Bell river which it joins at Kamikwanika island. It is reached by a series of portages from the Upper Harricanaw river starting twenty-three miles east of Seals Home lake. The first portage is about two miles long, the second nearly one and a quarter miles, the third one mile and the fourth a little more than a mile and a half. These portages pass through a heavily wooded country and are well cut out. Spruce, poplar, canoe birch and Banksian pine of large size are common, and there is some land of excellent quality, especially on the fourth portage going north. Between the portages there are three small lakes or ponds of clear water aggregating less than a mile in length. The last portage ends at a small stream flowing into Natagagan lake. This lake is four and a half miles long and one and a half miles wide in the southern part, but the lower part is not more than half a mile wide. The Natagagan river flows from the north end of this lake and is from one and a half to two chains wide. The soil, forest growth, and general character of the country drained by this river are the same as those already described on other streams in this area. The river was surveyed northward thirty miles from the south end of Natagagan lake. In this distance there are no large branches and only a few rapids, all of which can be run with light canoes. The water in all these rivers is muddy and it is impossible to see stones or sunken logs though only a few inches below the surface. These are frequently met with on the smaller streams and sometimes prove dangerous to canoes.

GEOLOGY.

Much difficulty was experienced in working out the geology of the district on account of the scarcity of rock exposures. The railway line runs along the height-of-land plateau where the surface is flat for long distances and the rocks are deeply covered with clay and moss. In places there are large areas of muskeg, so that, except in an occasional hill, outcrops could only be found along the shores of lakes and banks of rivers.

In going up the north branch of the Nawapitechin, northwest of the country examined by Mr. Johnston, the rocks met with for seven miles are altered diabases and porphyrites, followed by a dark quartzitic rock holding cubes of pyrite and considerable lime, and near this a yellowish green quartzite dipping to the east.

At the west end of the portage connecting the main river and south branch there is a small exposure of a light brown, fissile, sericite schist striking N. 60° W. vertical. Grading into this schist is a greenish rock showing the same strike and weathering to the depth of half an inch, the weathered part being a rusty brown ochre. Small quartz veins cut both these rocks. West of the brook and close to it there is a vein of quartz over a foot wide containing large crystals of pyrite. In crossing the height-of-land portage the rocks seen are altered diabase, porphyrite or greenish schists, probably chloritic. The strike varies from N. 70° W. to east and west. There are indications

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of iron at one point, but in small quantity, and quartz veins are numerous, but none, so far as I could see, carried minerals of economic importance.

Ascending the Fly river, the first rock seen is half a mile from the mouth and is a fine dark green schist. At the first rapid and portage less than a mile up there is a chlorite schist striking N. 75° W. vertical. Green schists of somewhat varying character extend up the river for three-quarters of a mile. For some miles up no rock exposures were visible; the first was a grey granite, followed a little farther up by green schist and reddish and grey granites. Between the two portages—which are a short distance below the forks—grey granite is again seen, and at the upper portage micaceous schist, holding numerous veins and pockets of quartz. Just above the forks at Owl mountain there is an outcrop of a coarse eruptive, and two miles farther up a diabase. Above this, as far as the river was followed, the rock is a fine-grained dark hornblende schist. The same rock was found between the forks of the river at Owl mountain. The top of this mountain or hill is a diabase. To the east the schist contains many bands of quartz running parallel to the strike. Some of the bands are four feet or more in width and may be traced for a long distance to the east. Prospectors reported masses of quartz of much greater width than the above, which they said could be traced three or four miles eastward. As far as examined no valuable minerals were found in them.

The northern exploration line of the Transcontinental railway crosses the Fly river five miles from its mouth. Eastward from the river at a distance of three miles along the line there is a low hill of hornblende schist and somewhat similar rock is seen for two miles farther. This is succeeded by green schist and porphyrite at six miles. Going eastward small exposures of green schists were noted for two miles, and then for four miles high ridges of granite alternating with green schist. East of this broken country to the Harricanaw river, the only exposures seen were chlorite schist, altered diabase and sericite schist. Between the Harricanaw and Bell rivers chlorite schist, granite, porphyrite and feldspathic schists occur, but the exposures in this distance were few.

The south exploration line runs south of Makamik lake and crosses the river from Lake Lois, less than two miles from its mouth. Half a mile east of the river, chalcopryrite occurs in small veins of quartz which cut diabase and green schists. Eastward along this line the rocks are similar to those on the north line. I am indebted to Mr. W. D. Robertson, engineer in charge, for rock specimens from the eastern part of this line.

The rocks on Seals Home lake, going down the west shore from the height-of-land portage, are micaceous sheared diabase or gabbro, biotite granite, chlorite schist, impure banded quartzite, hornblende schist and mica schist. North, along the Harricanaw river, similar rocks occur. At a small rapid eight miles north of the railway line there is an altered mass of diabase and granite cut by quartz veins holding small quantities of chalcopryrite.

The rocks on the upper Harricanaw and Natagagan rivers are much the same as those described on the adjacent streams.

The green schists are the common rock of the whole area from Makamik lake to

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Bell river. They are closely connected with the diabase masses and in places these rocks seem to grade into each other. In a general way the strike is east and west, and the schists are frequently vertical. Large quantities of pyrite are contained in these rocks either as cubic crystals or disseminated specks. Carbonate of lime is also present in many of them, often filling thread-like fissures.

MOLYBDENITE.

The granite in which the molybdenite occurs occupies most of the peninsula which divides Kewagama lake into two parts. It outcrops at intervals for over three miles on the east side. Mr. Johnston found it a mile and a half above the narrows on the west side, and as it forms the hills almost up to the north end it has an area of approximately seven square miles. The molybdenite is best seen at a narrow point which projects out about fifteen chains near the middle of the east shore. Here the granite is cut by vitreous and reddish-rusty quartz veins or dikes, from half an inch to four feet in thickness. Many of the veins strike northwest and southeast, but these are cut by others running in all directions. Some of them have clear cut walls and are very distinct. They all contain molybdenite, usually in thin crystals, some of which are nearly one inch in diameter. Along the shore to the south the granite outcrops for a mile and a half and contains quartz veins with small molybdenite crystals. An examination was made of the hills back from the lake; the same conditions prevail as at the shore except that there were fewer quartz veins and less molybdenite, but the latter could be found in nearly all the veins. These hills are about 265 feet (aneroid) above the lake. An analysis of specimens collected by Mr. Johnston from this locality showed that gold and bismuthite were also present in the quartz.*

Molybdenite was also found on a small island in Seals Home lake. The rock is granite with numerous quartz veins, one of which held molybdenite crystals.

The country has been heavily glaciated, as shown on almost every rock exposure. The stossing is invariably on the north side and is very distinct. The striae run from south to south 30° west.

Mr. Stanley A. Wookey of Toronto, who was my assistant, performed his work in a highly satisfactory manner.

During the summer I received much valuable assistance in carrying on the work from the officers of the Transcontinental railway, especially Messrs. A. N. Molesworth, K. Weatherbe, W. D. Robertson, B. R. Macdougall, Chas de B. Ammond, N. J. Lapierre, O. Robitaille and G. David McLaren.

* Summary Report, Geol. Survey, of Can., 1901, p. 138.

PETERBOROUGH, PRINCE EDWARD AND SIMCOE SHEETS.

W. A. Johnston.

My instructions for the past season's field work were, to complete the surveys necessary for the compilation of a map of the Peterborough sheet, and afterwards to begin work on the Simcoe sheet, which lies adjacent to and west of the Peterborough sheet.

The work remaining to be done on the Peterborough sheet consisted of surveys of the road connecting Seymour and Belmont tps., and Galway and Cavendish tps., and the previously unsurveyed lakes Scugog, Sturgeon, Balsam and Mud Turtle.

On May 23, I proceeded with my assistant Mr. J. H. Stothers, of Ottawa, to Campbellford, in the vicinity of which a week was spent in making necessary road surveys. From June 1 to June 18 work was continued in Galway, Cavendish and Lutterworth townships, with a special view of finding corundum, a deposit of which and its associated minerals was noted last year as occurring on lot 12, concession 4, of Lutterworth tp. All the hitherto unmapped roads in these townships were also surveyed.

Though no further discoveries of corundum were made, it is quite possible that careful search may reveal other deposits in the central and southwestern parts of Lutterworth township, where there are crystalline limestones and syenites with which corundum is usually associated.

On June 18, Messrs. Cane and Davis of Newmarket, Ont., joined me at Fenelon Falls and the following day a micrometer and compass survey of the above mentioned lakes was begun. This work was completed on July 24, when I received instructions to complete the surveys necessary for the mapping of Prince Edward county. We left Belleville on July 27, and started a micrometer and compass survey of the unsurveyed bays off the Bay of Quinte, including Big Island, Hay and Napanee bays.

The south shore line of the county from the eastern extremity, to the Murray canal, including East and West lakes, was also surveyed, and a tie line of sixty-five miles was run across the county connecting up different points on the north and south shores.

Upon the completion of this work, on August 29, Messrs. Cane and Davis returned to Newmarket, and the remainder of the season was spent in surveying the roads and defining the geology of the eastern portion of the Simcoe sheet, including the townships of Bexley, Carden, Eldon and Mariposa. The season's survey included in addition to lakes and the Prince Edward shore line six hundred miles of roads. We returned to Ottawa on September 22.

The map of the Peterborough sheet is now being compiled and together with the report on the sheet, will be sent to press as soon as possible.

GEOLOGY.

The construction of that portion of the Trent Valley canal, between Lakes Balsam and Simcoe, has exposed good and lengthy sections of the Trenton and Black River limestones. A cutting of from ten to thirty feet in depth has been made in the Trenton limestone for a great part of the distance between Balsam lake and the lift-lock, which is situated near the village of Kirkfield. Below the lock the cutting is mostly in the Black river and continues so for three-quarters of a mile, to the valley of the Talbot river. The lowest beds exposed in the cutting just below the lift-lock probably form the top of the Black River formation. The Trenton limestone extends for about three miles north of the canal into the township of Carden, the central and northern parts of the township being occupied by the Black River formation, which extends north as far as the south branch of the Black river. About three miles northwest of the lift-lock a granite boss rises above the surrounding country. The Black River limestone, containing an abundance of its characteristic large fossils, rests against its sides at an angle of fifteen degrees.

In the southern part of Dalton township, near Uphill P.O., an outlier of the Black River formation occurs, remarkable for its thickness and the escarpment which it displays.

The wells sunk at the lift-lock for the hydraulic rams, which support the pontoons, showed a thickness of ninety feet of Black River limestone. Near the bottom of the wells soft, yellowish, thin-bedded and arenaceous limestones were encountered similar to some of the beds seen near the contact with the Archaean at Head lake, in Laxton township, and at other places in this district. These contact beds, which are of considerable interest and vary widely in character and thickness, are best seen at the Burnt River quarries in Somerville township, and at Head lake in Laxton. They will be more fully described in the report on the Peterborough sheet.

The limestones of the district between Balsam and Simcoe lakes have a general dip of two to five degrees towards the southwest. This dip, however, is varied by several undulations, one of which is cut by the canal a short distance below the railway bridge near Kirkfield, and shows a slight dislocation in the strata. This fault is probably post-glacial as the crest does not appear to be glaciated.

Glacial markings are numerous and the general direction of the striae, which are well displayed in the limestones along the canal, is south thirty degrees west, magnetic.

The rock dumps along the canal furnish an abundance of Trenton and Black River fossils. The lower beds of the Trenton are especially rich in fossils and contain a great number of well-preserved crinoids, star-fishes, corals, &c. The best hunting ground for these is along the canal for a mile or so above the lift-lock, from which locality a good collection of crinoids and star-fishes was obtained.

The product from a stone-crusher which was in operation during the summer near Kirkfield, utilizing the limestone from the dumps along the canal, was being shipped to Toronto for use in concrete work. Much of this stone would also be fit for the manufacture of lime.

The peat works near Victoria Road were operated throughout the season, and produced upwards of one hundred tons of wet or twenty-five tons of dry peat per day.

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The season was an exceptionally good one and the process employed here seems to have met with some success. The plant established a few years ago at the peat bog two miles east of Kirkfield, was not in operation, and some of the buildings were being demolished.

In drilling a well on the farm of Mr. McKenzie, near Kirkfield, a flow of natural gas was struck in the Trenton limestone at a depth of seventy feet. The gas continued to flow at a low pressure for several weeks.

SURVEYS ON PARTS OF THE PROPOSED ROUTE OF THE TRANSCONTINENTAL RAILWAY IN NEW BRUNSWICK.

R. A. A. Johnston.

The early part of the year was devoted to the plotting of surveys of previous years, and to further investigations into the subject of Canadian meteorites. Special efforts have been put forth to enlarge the Museum collection of these objects, and the following additions have been made during the present year:—

By purchase—

Model and mould of Iron Creek—Siderite—1870.

Model and fragment of Beaver Creek—Aerolite—May 26, 1893.

Model of DeCewsville—Aerolite—January 21, 1887.

Whole mass and mould of Gay Gulch—Siderite—1901.

By exchange—

Model of Shields (Shelburne)—Aerolite—August 13, 1904.

Negotiations are in progress for the acquisition of other specimens.

In compliance with your instructions, I left Ottawa July 3, accompanied by Mr. J. R. Marshall, who rendered very efficient service as my field assistant throughout the season. Arriving at St. John we were permitted, by the kindness of Mr. Guy C. Dunn, district engineer of the National Transcontinental railway, to examine the location-plans of the line between the neighbourhood of Grand Falls in Victoria county to its intersection with the Chatham and Fredericton branch of the Intercolonial railway at Portage Road crossing, in York county, the so-called Back or Central route; blue prints of these plans were subsequently furnished us for use in the field, through the permission of Mr. H. D. Lumsden, the chief engineer; for these and other courtesies extended by these gentlemen, I wish here to record my keen appreciation. From St. John we proceeded to Fredericton, and thence to Plaster Rock, where a short time was spent in the examination of some of the more important points in the neighbourhood. On the 9th we moved out along the Grand Falls road to the vicinity of the Dead brook, from which point examination was made of the country to the northwestward as far as Little Salmon river. A week was taken up in this work, and camp was then moved back to a point on the Tobique river about two miles above Plaster Rock, whence examination of the country to the northwestward as far as the south branch of the Gulquac stream was made. On the 20th we proceeded to Reed island, and the remainder of the month was occupied in an examination of the country drained by the Wapskahegan and Odell streams and their tributaries, as well as that about the upper reaches of the north branch of the Southwest Miramichi. On August 1, we proceeded to Bath station, and thence to the mouth of West brook, on the north branch of the Southwest Miramichi; our further progress was now effected by means of canoes, often with very great difficulty by reason of the low water in the streams. We reached Boiestown on August 21, and proceeded to Stanley, from which

place surveys were made of portions of the country about the Nashwaak and Taxis rivers. On the 28th we went up to the village of Grand Falls, and from there completed the survey to the Little Salmon river. Wherever the nature of the country permitted, traverses were made from various points, and in the settled districts odometer surveys were resorted to.

The area examined includes portions of the counties of Madawaska, Victoria, Carleton and York, and is embraced in map sheets 2 N.W. (Grand Falls sheet), and 2 S. W. (Andover sheet). It is, generally speaking, a well-watered area, being traversed by a number of the larger streams flowing into the St. John and Southwest Miramichi rivers. From Grand Falls southeastward to the neighbourhood of Salmon river it is formed of a series of broad undulations frequently cut by deep ravines or water courses; thence eastward the elevations become more abrupt until the divide between Little Salmon river and Three Brooks stream is reached, where are clustered a number of sharp angular peaks which form a striking feature in the landscape for several miles around; from this point there is a gradual descent through the moderately hilly country in the neighbourhood of Plaster Rock to the banks of the Tobique river. A short distance south of its intersection with the Grand Falls road, the National Transcontinental railway, as it is now surveyed, forks, one branch following a somewhat circuitous route crossing the Tobique river some two miles above the village of Plaster Rock, runs northeastward to within a short distance of the south branch of the Gulquac river, and then swings across Little Wapskahegan and River des Chutes to near the head of Beaver brook, where it reunites with the other branch which has followed a more direct route, but with much steeper grades, crossing Tobique river a short distance below the mouth of the Wapskahegan. From the head of Beaver brook there is a gradual rise across the east branch of the Odell stream to the summit of the ridge separating the valley of the Tobique from that of the Southwest Miramichi at the head of West brook. A descent is then made down the valley of the north branch of the Southwest Miramichi to a point about three and three quarter miles above the forks, where the line crosses over and follows along the slope of a low ridge lying to the north of the Southwest Miramichi until Half-moon cove is reached. The line here crosses the main stream and runs around the heads of Miramichi and Napudogan lakes. It then follows along the valleys of Jewitt and Arnold brooks and intersects the Chatham and Fredericton branch of the Interecolonial railway at Portage Road crossing.

GEOLOGY.

The country traversed has been geologically surveyed in previous years by officers of the Survey and the boundaries outlined on the map sheets previously referred to. The crumpled and upturned rocks of the Silurian strata, interbanded with and invaded by secondary white calcite, are abundantly exposed at various points along the St. John, Little and Salmon rivers. In some places they are interspersed with thin fissile shales, and occasionally with dikes of grey diabase running with the strike. The sharp angular elevations about the heads of Little Salmon river and Three Brooks stream are formed of a series of felsite eruptives, generally of a greyish or reddish-brown colour, often highly fractured and in some instances showing a distinct flow-structure. Extensions of these rocks were traced at intervals as far as Blue Bell mountain to the southwestward; overlying these at one or two places there were

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observed some small occurrences of a highly altered schist holding phenocrysts of a brownish feldspar. The precise horizon of these is not as yet clear though there is little doubt that they are of greater age than are the Silurian strata immediately to the westward, and may be referable to the pre-Cambrian rocks found over large areas to the eastward. Passing eastward to near the head of Beaver brook the country is underlain by rocks of Lower Carboniferous age. Outcrops of these are seen at various points along Three Brooks, the Tobique, the Gulquac and the Wapskahegan, the heaviest exposures occurring in the cliffs about Plaster Rock; they at times consist of fine-grained greyish or reddish sandstones, but oftener as banded bluish or purplish argillites, sometimes associated with bands of a pinkish compact limestone. Along the ridge to the west of the north branch of the Southwest Miramichi the metamorphic series of the Cambro-Silurian are observable at many points as grey or white highly siliceous laminated rocks, generally much crushed and highly contorted. Rocks of similar character occur about the head of Miramichi lake and along the Taxis river. Between the forks of the Southwest Miramichi river and Miramichi lake, however, the country is traversed by a belt of greyish or reddish granites and dark-coloured gneisses and mica-schists. To the southeastward the Cambro-Silurian rocks are succeeded by strata of Lower Carboniferous, and these in turn by strata of Middle Carboniferous, age.

ECONOMIC MINERALOGY AND LITHOLOGY.

It cannot be claimed that the district is rich in mineral resources nor does it appear probable that any of the metallic minerals found at different points, more particularly in the metamorphic series, will ever be found in sufficient quantity to warrant any great outlay of capital in their exploitation. Iron pyrites are found scattered in small particles throughout the greater portion of the area and the diabases frequently show insignificant amounts of pyrrhotite. Galena and Molybdenite also occur in small amounts at a few places along the Taxis river and in the country between it and the Southwest Miramichi. Little is being done to develop the plaster industry about the village of Plaster Rock. A small working was recently operated for two or three years by the Canadian Pacific Railway Company about a mile below the village, but was discontinued at this point in June of this year. Discoveries of coal have been reported from time to time from the Middle Carboniferous area east of the village of Stanley. These discoveries have sometimes resulted from well-boring operations and their commercial value has never been proven. Small quantities of building-stone have at time been quarried about the village of Grand Falls to supply a local demand only; flags of large dimensions are often obtainable, but their fissile character and the presence in them of considerable amounts of readily oxidisable iron-pyrites must necessarily militate against their use where great strength and durability are essential. Granite of good quality is to be found in abundance in the area between the forks of the Southwest Miramichi river and Miramichi lake, as well as along Bedell, McKeel and Clearwater brooks. In addition to the ledges of granite exposed at different places in this area, the large boulders with which the country is freely strewn might be made to furnish very considerable quantities of this material.

TIMBER.

The greater portion of the district has from time to time been lumbered over so that, excepting the hardwood growth with which the ridges and also the undulating country about Salmon river are clothed, very little of the virgin forest is still standing. The hardwood timber has been but little disturbed except for the pine and spruce with which it has been in places interspersed. It is made up of yellow and white birch, rock maple, and beech, much of it being of large dimensions. Forest fires have in the past done incalculable damage and over large areas the only evidence of the former growth is to be found in the charred remains of the great pines and spruce with which the country must have formerly been covered. No attempts at artificial reforestation have ever been instituted and these burnt areas are now either barren wastes or are covered with impenetrable thickets of balsams, poplars, birches, tamarack, pin cherries, alders and the like. In exceptional cases a growth of red pines has sprung up which will in a few years, providing they escape the ravages of future conflagrations, become of considerable value. With the application of advanced forestry methods, the forest growth might be greatly improved and should, with adequate fire-protection, in time yield a fair return for any legitimate outlay made upon it.

AGRICULTURE.

Most of the lands at all well adapted to agricultural purposes have already been taken up. The most important of these lie along the St. John river and its tributaries and are embraced in the settlements of Chamford, Commeau Ridge, Ennishone and New Denmark and a strip along the Tobique. A less important area is that to the north and northeast of the village of Stanley, embraced in the Williamsburg, Cross Creek, Green Hill and Maple Grove settlements. The soil of that portion of the St. John River valley lying in the neighbourhood of the village of Grand Falls is in the main made up of the detritus of the underlying Silurian rocks, mixed occasionally with alluvial gravels and drift materials, and is capable of furnishing excellent crops of the various cereals and vegetables in ordinary cultivation. Along the Tobique the red clays derived from the disintegration of Lower Carboniferous rocks afford excellent crops of grain and grasses. The cleared ground about the four last mentioned settlements furnishes fair crops of oats and grasses. The remaining portions of the country traversed by the Back or Central route of the National or Trans-continental railway are generally unsuited to agricultural pursuits since, even where the soil is otherwise fertile, the great accumulation of boulders with which the ground is cumbered renders successful tilling well nigh impossible.

SOUTHERN NEW BRUNSWICK.

R. W. Ells.

The greater part of the season of 1906 was spent in an examination of the area adjacent to the city of St. John, in obtaining materials for the construction of a geological map, not only of the city itself but of the area comprised within a radius of ten to twelve miles. This area would extend westward to Musquash harbour, northward nearly to Devils Back on the St. John river and eastward to Loch Lomond and the Black river. In addition, a couple of weeks were spent by my assistants, under the direction of Mr. J. A. Robert, in mapping the area surrounding the Musquash river and lakes, a district which had never before been closely examined. This was done to connect the work of Mr. R. A. A. Johnston in eastern Charlotte with that along the St. John river.

Owing to the unusually fine weather of the season but little time was lost through rain or fog. The compilation of the map of the St. John area has already been commenced by Mr. Robert, but as most of the geological work in this district was done nearly forty years ago, when no attempt was made to map the several formations accurately, it has been found necessary to make numerous changes in these as depicted on the published map of southern New Brunswick (1878), on the scale of four miles to the inch:

In addition to the general supervision of this work, some weeks were spent in the examination of the mining conditions throughout the province in order to bring out a revised edition of the 'Mineral Resources of New Brunswick,' written by Dr. L. W. Bailey several years ago. In the forthcoming report the latest information regarding the possibilities of economic mineral development will be given. A few days were also spent with Mr. Hugh Fletcher in Nova Scotia in the study of the complicated group of formations lying to the south of the Dominion Atlantic railway between Wolfville on the east and Nictaux on the west.

In field work I was assisted by Mr. J. A. Robert of this department and by Mr. J. Russell Archibald and Mr. A. A. Fleming. While a large amount of work had been done in this district in the matter of surveys as far back as 1877-8, additional information was obtained by detailed work along the shores, wood-paths, new roads, &c., in order that the boundaries of the several geological formations may be laid down as precisely as possible.

DEVONIAN.

One of the most important of the changes made in the geological work about St. John is the transference of the dark red conglomerates and sandstones of Kennebecasis bay, several miles north of the city, from the Lower Carboniferous to the Devonian. Though the resemblance of these rocks to those of the Perry group in Charlotte county was pointed out some years ago, their general resemblance to Lower Carboniferous sediment in the southern part of the province decided the authors of the report on the

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district in 1879 to colour them as a part of that formation. During the last three years, however, the study by Dr. David White of the Perry group about Perry in the state of Maine, led to the determination that these rocks belonged rather to the Upper Devonian, a conclusion stated in our report on Charlotte county in 1903. Last summer, during an examination of these rocks on Kennebecasis bay, they were found to be overlaid conformably by grey sandstones, grits and shales, which contain flora of Devonian types. A large collection of these plant fossils was made and examined by Dr. G. F. Matthew of St. John, and their Devonian facies clearly determined. As these grey beds are unquestionably above the Perry dark red conglomerates the Devonian age of these is still more clearly defined.

The importance of this determination of horizons is apparent, since within the last few years a controversy has arisen on the part of certain paleobotanists as to the age of the great series of slates, conglomerates, &c., both to the east and west of the city. These have long been described as of Devonian age by the Geological Survey officers. They have been divided into several groups, known as Bloomsbury, Dadoxylon, Cordaite and Mispec. Last year it was found that the Perry conglomerates, whose Devonian age is now universally admitted, rest conformably upon the upper division of the whole Devonian series, viz., the Mispec, on the east side of Courtney bay, in a large outlier of some hundreds of feet in thickness. There can, therefore, be no longer any doubt as to the actual position in the geological scale of the Devonian rocks of the St. John district. This change in classification of the dark red conglomerates of Kennebecasis from Lower Carboniferous to Devonian will necessitate a recasting of the extension of these rocks to the northeast through King's county, since they can be traced in this direction probably into Albert county. They can be separated from the overlying Lower Carboniferous by careful examination of the district throughout. The details of these formations will be given in the forthcoming report.

In consequence of the great alteration which some of these Devonian rocks have undergone certain portions now closely resemble schists of pre-Cambrian age, and in the general map they were so designated. Part of this alteration is due to local intrusive masses of diabase and granite, and part to foldings and other causes. East of St. John this alteration to schists is well seen near the shore between Cape Spencer and Black river, and westward in the Pisarince peninsula, and farther west in the direction of Point Lepreau. In this direction, near Musquash, and at Little Lepreau, Belas basin, the associated limestones near the base of the formation have been changed to the crystalline condition and resemble certain pre-Cambrian rocks elsewhere in the province. A close examination of these schists at a number of points showed that the alteration could be traced from the ordinary Devonian slates and shales into the crystalline condition. As a consequence certain areas on the published map will be changed from pre-Cambrian to Devonian.

CAMBRIAN.

Between the Devonian and the top of the Cambrian no sediments of Silurian or Cambro-Silurian age have yet been detected in the area of the St. John map sheet, and these formations, if ever deposited, have been denuded prior to Devonian time. Farther north, however, along the upper part of the Long reach, and west in Charlotte county, fossiliferous Silurian rocks are found in areas of considerable size.

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Large areas of intrusive or igneous rocks are seen in every direction. They penetrate all the formations from the highest to the lowest, and comprise fine and coarse granite, gabbro, diorite and diabase, rhyolites and traps. The green diabase rocks abounding in epidote are markedly intrusive in the crystalline limestones everywhere, and the lowest division of the Devonian, styled the Bloomsbury, is cut by green epidotic diabase in all directions. In character these two series of diabase closely resemble each other. They do not, however, appear to affect the upper members of the Devonian, though a reddish-brown and sometimes greenish diabase cuts the Perry conglomerate at some points. A hard green diabase cuts the Cambrian slates and quartzite near St. John city, and the lowest fossiliferous member of the Cambrian—the Etcheminian—is cut by a slaty green felsitic rock, which forms a marked feature for miles between the crystalline limestone and the slates.

The felsite rocks are of two series at least. In parts they appear, as in Charlotte county, to be a portion of the newer granites, but the felsite and associated diabase of the Kingston peninsula, and of the area west of the Long reach of the St. John, underlie the Cambrian there, and the base of the Etcheminian contains pebbles of the felsite rock below. These are distinct from the large masses of granite and green diabase which cut the crystalline limestone all round the city, as well as the Cambrian slates.

The Cambrian, formerly known as the St. John group, comprises a considerable thickness of slate, shale and sandstone, the last often changing into a hard quartzite. Fossils have been collected by Dr. Matthew at many points throughout the series, so that the group, as a whole, is now divisible into several stages. The slates are often well banded in shades of green, black and grey; and in this respect closely resemble what are called the banded slates of the Eastern townships of Quebec. Occasionally, a reddish band is visible in the series. The fossiliferous portion apparently rests upon the crystalline limestone in part, while in places the limestone appears to be part of the slate series. The Etcheminian division near the base represents at present the lowest known fossiliferous portion. It is separated from the limestone in places by a great mass of intrusive diabase, sometimes with a slaty structure induced by pressure, but which can be seen to cut the red beds of the Etcheminian at several points.

The crystalline limestones are found to be merely local developments. Some of the outcrops are exceedingly limited, and are mere lenses in the grey and striped slates, while some can be traced for several miles but have no great thickness, and are much broken by intrusive masses. They are generally interstratified bands or lenses in the grey, black and green slates and hard quartzite. The alteration of these limestones to the white crystalline condition is often due to local intrusions of granite or diabase, and elsewhere the rock is often bluish and slaty in character. The colouring is sometimes due to the presence of graphite. There are no gneisses in the St. John rocks like those of the Grenville or Hastings series, nor are there any of the schists of the old type of those series, though occasionally some of the interbedded slates assume a schistose form. As a whole, these rocks closely resemble portions of the Sillery division of the Quebec group as seen south of the St. Lawrence, both in the nature of the limestones and conglomerates, and in the interbedded slates. If this could be clearly shown on the evidence of fossils, the whole series of limestones

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and slates would without doubt be recognized as a part of the Cambrian. In parts bands of limestone conglomerate and thin limestones occur, clearly interbanded with the slates, and these are identical in character with the banded dark slates of the Sillery. In these rocks in Quebec fossils are rarely found, and their alteration in the St. John rocks, together with the fact that no close examination of these interstratified slates appears to have been made, as was done with the St. John City slates, may account for the present lack of fossil evidence. With the exception of the felsites of the ridge north of Kennebecasis bay, and the hornblende schists north of the Long reach, no characteristic pre-Cambrian rocks were seen in the area in question, and, with the exception of some of the more crystalline limestones, nothing resembling the crystalline rocks of the Grenville and Hastings series of Ontario and Quebec was observed.

The division formerly styled Coldbrook, which has usually been regarded as one of the divisions of the Huronian system, consists for the most part of igneous rocks, diorite, diabase, granite and felsite. In many places these present a bedded structure, while elsewhere they cut directly across the lower portion of the Cambrian fossiliferous rocks. In fact, in the volume, 'Cambrian rocks of Cape Breton,' by Dr. G. F. Matthew, the Coldbrook is there included as the lowest Cambrian beneath the Etcheminian formation in which Cambrian fossils have been found. The Cambrian about St. John is much affected by faults, overturns, &c., shows much alteration in many places in the presence of quartz veins and schistose structure, and in the presence of highly quartzose beds. At the Suspension bridge over the St. John certain beds occur which contain fossils of Upper Cambrian type or the lower portion of the Cambro-Silurian such as *Phyllograptus*, and on Navy island in the upper part of the harbour the slates contain *Dictyonema sociale*. With the former at the bridge are crystalline limestones in narrow lenses, and the interstratified slates are highly graphitic, while both slates and limestones are broken across by intrusives. The details of this structure can only be shown by mapping on a large scale.

ECONOMIC MINERALS.

In regard to the economic minerals, it is to be regretted that but little work is now being done. The principal mining now carried on in the province is in connection with the coal seams at Minto in the Grand Lake area, and at Beersville in Kent county; and in the plaster deposits of Albert country, which have been worked for many years. Building stone and grindstones are still produced in considerable quantities from the freestones of the Millstone grit formation, principally; though at Sackville a very fine quality of brown stone is being quarried from massive beds of Upper Carboniferous age. The granites of the Magaguadavic river and of Spoon island on the lower St. John, are being quarried quite extensively. With the exception of the McLean mine at Letite all work on the copper deposits throughout the province has been suspended, at least for the present.

COAL.

In the coal output there is a marked change for the better, as contrasted with the work of even five years ago. At Minto, the terminus of the New Brunswick railway from Norton station on the Intercolonial, formerly known as Newcastle creek, a number of mines are worked on the coal seam which was tested there many years ago. At

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this place there are two seams, one of eighteen to twenty inches, which is that usually worked, and a second and a lower of ten inches. In places these two come together or have a thin parting only, so that it is possible to mine about thirty inches of coal. This is the thickness measured at King's mine and the workings are connected with the surface by a shaft thirty feet deep. In drifting about two feet of shale roof is removed to give head room. The shale parting between the seams at this mine is only three inches.

The coal after hoisting is carefully screened and inspected by an inspector for the Intercolonial railway, before being shipped to Norton, fifty-nine miles distant by rail, where it is used on the locomotives running between Moncton and St. John, and gives satisfaction as a steam producer. A number of mines in the Minto area are connected by railway, all of which are apparently opened on the same seam, though only at four are the two seams worked, the others mining the upper or twenty inch seam only. The output of all the mines in this belt is shipped by rail, but from a number of others situated nearer the shore of Grand lake, the old methods of hauling to the wharf and shipping by water, as run of mine coal, is still maintained. But little if any attempt at cleaning this part of the output is attempted and the resulting output is dirty and unsatisfactory as a first class fuel, containing considerable slate and bunches of sulphur. About 4,000 tons of this variety is thus shipped yearly. The seam is sometimes worked by stripping off the surface rock and soil, but this is only possible when the coal lies near the surface. The entire coal output during the past year is about 40,000 tons, which as compared with the annual out-put under the old system of 8,000 to 10,000 tons, shows a marked advance. This output could be largely increased if miners could be readily obtained. The amount of coal taken per acre from the thirty-inch seam is estimated at nearly 4,000 tons, all the coal being removed as the mining progresses. It has thus been proved that the Grand Lake coal, when properly mined and handled, can furnish a fuel for steam or house purposes equal to that produced from most of the mines of Nova Scotia, and that by economic efforts it will yield a fair profit to the operator. This screened coal brings \$3 per ton delivered to the I.C.R. at Norton station. Recent borings in this locality showed no trace of underlying seams to the bottom of the formation. In all, nine mines are operating in the Minto basin, shipping their product by rail and working all the year, while twelve mines are worked irregularly and are shipping by water.

Mining is also carried on at Beersville in Kent county on a seam which is probably an extension of that at Minto. The outcrop is on the bank of the Coal Branch sixteen to eighteen inches, and the levels are driven in from the river bank, with an overhead capping of grey shale and sandstone of thirty to forty feet; the hoisting to the top of the bank is done by a horse whim. The mine is connected with the Intercolonial railway, seven miles distant at Adamsville, by a branch railway. The coal is worth \$3.25 per ton on the I.C.R. and mining with a small force has been carried on for several years.

BORING FOR COAL.

Some years ago a series of borings was made at Dunsinane in Kings county, sixty miles from St. John, on the Intercolonial railway. In these two seams were located, similar to those of Minto, at the head of Grand lake, and there was a ten-

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dency, as disclosed by the borings, for them to unite and form a seam of about two and a half feet, the supposed junction of the seams being only a short distance north of Dunsinane station. Some coal was mined from the outcrop of the eighteen inch seam several years ago and the quality was found to be excellent. Further borings are contemplated to prove the question of the union of the two seams. The coal basin at this place is merely the extension of that in the Grand Lake area, the character of the rocks and the contained coal seams being similar at both places. The coal outcrops along the western edge of the basin, which is somewhat narrow, and dips to the east at a moderate angle, so that in mining at the supposed junction of the two seams a much deeper shaft than at Minto will be necessary. Its position in close proximity to the Intercolonial is, however, an important factor, and should it be found that the two seams unite and form a bed of thirty inches of good coal the area can probably be profitably worked.

During the past summer borings with the diamond drill have been carried on in Gloucester county at a point about five miles south of the village of Upper Caraquette. A small seam of shale and coal outcrops at this place, but though the boring reached a depth of 650 feet and passed down into red marly shales, probably beneath the Middle Carboniferous formation, no trace of any lower seam was found. The conditions for workable seams in this district are not encouraging.

OIL.

Boring for oil in the Memramcook area has been discontinued for about two years. In all, between sixty and seventy holes were sunk near Memramcook river, at Dover on the Petitcodiac, and on the west side of the latter in Albert county. While many of these holes showed no indications of oil, probably 50 per cent have produced it in small quantity. Of these wells in all about thirty are pumped in the two areas of Dover and Memramcook, and the yield though small is tanked and shipped by the Intercolonial railway from Memramcook. The holes are all bored in the Albert shales, the bottom of which does not appear to have been reached, unless in one hole which was carried to a depth of over 3,000 feet, and was begun in the capping of grey Millstone grit. The borings from the bottom of the deep well appear to be a brownish shale, but this may belong to some portion of the underlying Devonian rocks. Not having cores for determination some amount of uncertainty exists as to the base of the Albert shale formation in this area. The age of these rocks is about the same horizon as that of the shales bored in Cape Breton at Cape Ainslee, as also at Cheverie on the south side of Minas basin in Nova Scotia, and at Gaspé, where the rocks are more sandy and contain less bitumen. In all these places wells have been sunk for oil, but in none has it been found in economic quantity.

The Albert shales are, however, highly bituminous throughout, and contain certain bands carrying from three to nearly twenty feet in thickness which are especially rich in petroleum. As such they are well fitted for the manufacture of oil by distillation after the manner of the oil shales of Scotland, and other countries. Experiments are now being carried on to ascertain the fitness of these shales for the manufacture of oil and by-products by distillation on a large scale. If these are successful the Albert shales will without doubt prove to be one of the most valuable mineral assets of the province.

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GYPSUM.

Work on the plaster deposits of Albert county is still carried on extensively, and new deposits have been recently opened up in the southern part of the county near Hopewell; at Martin head, on the coast of St. John county, and at Pink ledge, about one mile north of the end of Cape Maringouin in Westmorland county. The description given by Mr. C. J. Osman in the 'Report on Mineral Resources of New Brunswick' is equally applicable to-day. A large percentage of the gypsum is shipped in the raw state to the United States, while at Hillsborough the calcined plaster industry has assumed large proportions.

IRON.

Iron has been found in large quantity on the bank of the Nipisiguit river about twenty-one miles above Bathurst. The ore is for the most part a magnetite, and forms large masses in schistose rocks which are probably squeezed eruptives. These are cut by dikes of igneous rocks near which the iron is developed. With the exception of some portions near the contact the ore is almost free from sulphur, but contains a considerable percentage, 10 to 20, of silica as well as of phosphorus, the amount of which from a number of samples ranges from .517 to 1.231. The percentage of iron in the ore is from 46 to 53. The deposit has been traced for nearly two miles back from the river and shows, where uncovered, a breadth of thirty to forty feet at the surface. It has not yet been proved in depth. A branch line of railway nine miles in length is required to connect with the Intercolonial railway and the quantity of ore in sight should render the deposit of commercial value. It is proposed to test it in depth by boring with a diamond drill at an early date.

No work has been done within recent years on the iron deposits near Woodstock in Carleton county. The ores of West Beach were examined and found too much disseminated through the rock to warrant the expenditure of capital in mining. Work on the deposit at Lepreau is at present suspended.

COPPER AND MANGANESE.

Mining for copper is still being carried on at the Letite mine, the shaft having reached a depth of over 300 feet. This property was described in the report of Professor Hind, 1865, under the name of the Wheel Louisiana, and a large amount of money was spent forty years ago in an attempt to develop the mine on a commercial basis, but without success. The ore appears to follow a line of fault or contact between the altered Silurian slates and a mass of green diabase, but the ore-streak is very irregular, thinning out at times to an inch or so, and sometimes enlarging to a foot or more. The ore occurs in quartz along the zone of the contact and consists as yet, for the most part, of iron pyrite and pyrrhotite, with a small amount of chalcopyrite. It is proposed to carry the shaft down to a depth of 500 feet.

The manganese mines are at present unworked. These deposits are apparently all contacts, and very irregular in their distribution.

GRINDSTONES.

Grindstones of excellent quality are made in large quantity during the working season at Stonehaven by the old firm of Bedford Reid, the stone at this place forming

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a layer of over twenty feet in thickness, interstratified with a reddish-brown shale. Another firm has opened a quarry in similar stone a mile farther to the east, on the shore of Chaleur bay. In the southern part of the province, at Wood point, about three miles south of Sackville, the stone is reddish, belonging to the Upper Carboniferous formation, and good stones are here also made, some of the material being taken from the old Rockland quarry, a few miles to the south, from beds of Millstone grit age.

BUILDING STONES.

Of building stone many quarries exist which have been worked from time to time as local requirements demand, and are then closed down indefinitely. These are mostly in the sandstones of Millstone grit age. Of these several large quarries were formerly operated along the Miramichi river between Newcastle and Douglastown, from one of which the stone for the Langevin block at Ottawa was taken. These are all closed at present but a fine quarry similar in character to the Fish quarry near Newcastle has been opened at Indiantown on the Southwest Miramichi, about twenty miles west of the main line of the Intercolonial railway. This is owned and worked by Mr. Hood, of Montreal, and furnishes a fine quality of olive stone, in blocks of any required size. The formation is Millstone grit, and the quarry is easy of access.

The only other quarry worked for building stone in the northern part of the province is at Grand Anse, on the south side of Chaleur bay, where the stone for a large church is being obtained. Owing to the great extension of the grey sandstones of this formation throughout the eastern part of the province, quarries can be easily started and supply a local demand very readily.

In brown stone the only quarry at present being worked is at Sackville, owned by Mr. Charles Pickard. This quarry furnishes a fine quality of brown stone, in blocks of any required size, of fine colour and texture, lying nearly horizontal in heavy layers. The output is shipped west to Montreal, Toronto, Ottawa, Hamilton, &c.

GENERAL CONCLUSIONS.

From the examination of the principal mining centres throughout the province it would appear that the mining of ores has hitherto been unprofitable, and that immense sums of money have been wasted in attempts to develop areas which will always be valueless from the economic standpoint. As regards coal, there is a marked improvement within the last five years, the output having increased to over 40,000 tons yearly, which amount could easily be further increased if men could be obtained and the work prosecuted on a more extended scale. From the results obtained at the principal mines at Minto it has been shown that a good quality of coal can be profitably extracted with due regard to screening and general economy of management. In the screening at Minto there is of necessity a considerable amount of small coal, and if the tests now contemplated show that a good merchantable coke can be made from this, it might be possible to utilize this coal in the smelting of the iron ores of the Nipisiguit river, where recent exploration has disclosed the presence of other large ore bodies in addition to those seen during my visit in the summer. If the present system of mining the coal, in which every small owner carries on a small and independent colliery, could be changed so that all could be united under one management, much better results would un-

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doubtedly be obtained for all concerned, and a large amount of excellent coal would be supplied for both domestic and steam purposes at a reasonable rate, and with a good return on the capital invested. The local government has now several drills for the purpose of testing, by borings, any mineral localities regarded as worth proving. It is to be regretted that so far no arrangements have been made by which the results of these borings can be obtained. In some cases the logs cannot be found, in other cases the cores have not been carefully labelled or even kept in any kind of order, sometimes being found lying around the boring sites. Instead of this they should be kept properly so as to form a continuous record of the rocks passed through, as a guide to future operations. What is to be desired is the testing of coal lands and other mineral localities in carefully selected places, where the most satisfactory results could be obtained. Such locations should be made by a competent person rather than by the ordinary haphazard method. In this way the actual values of certain areas as mineral producers could be ascertained at a minimum of cost.

SURVEYS IN WESTERN NOVA SCOTIA.

Hugh Fletcher.

The early part of the year was spent by Mr. Fletcher in the usual work of the office, in which he was assisted by Mr. J. A. Robert, who has compiled for the engraver sheets Nos. 84 and 99 of the district lying along the south shore of the Bay of Fundy, between Scots bay and Victoria harbour.

From June 4 to November 18 Mr. Fletcher continued surveys in Nova Scotia in the counties of Hants, Kings and Annapolis, and was mapping the district between the Avon river and Torbrook iron mines, comprising sheets Nos. 85, 98 and 103, already mentioned as embracing the Horton rocks and the iron deposits of Torbrook and Nictaux. These maps are of immediate importance to the province, and their publication is being pressed forward.

Mr. Fletcher was assisted by Messrs. M. H. McLeod, Harold F. Tufts, B.A., and W. W. Hughes, who for a time worked in conjunction also with Mr. Faribault's assistants, A. Cameron and J. M. Cruickshank, who had previously surveyed in this and the adjoining district to the south. Mr. Fletcher testifies to the interest taken by all these gentlemen in their work.

KINGS AND ANNAPOLIS COS.

The season was chiefly occupied with supplementary surveys in the district referred to in the Summary Report for 1905, page 119, Messrs. McLeod, Cameron and Hughes making most of the surveys necessary in the neighbourhood of Hantsport and Benjamin's mills, while Messrs. Cruickshank and Tufts revised the country from Wolfville to Torbrook mines.

Mr. Fletcher left Ottawa in company with Dr. Ells. On their way east they examined in the vicinity of Quebec, Sillery, the Island of Orleans and other places, rocks which in some respects resemble the reddish, greenish and fawn-coloured slates of Wolfville, Kentville and Canaan in Nova Scotia. Dr. Ells, with Mr. Faribault, again in August spent some time with Mr. Fletcher in an examination of the sharply folded rocks of Kings county, where the scarcity and obscurity of fossils and the contorted structure render exact determination difficult, a conference upon the ground on typical areas having been recommended by the Director as desirable for better correlation in the areas in which the surveys adjoin.

The similarity of the *Dictyonema* series to the Sillery of Quebec and the Lower St. Lawrence, and of the grey slates to Cambrian rocks near St. John, N.B., was pointed out by Dr. Ells long ago. On the other hand, the association of the fawn-coloured slates of the Fales river with fossiliferous Silurian sandstones which extend thence to Torbrook mines, and the occurrence of *Dictyonema* with the fossil shells of Messenger brook, makes great caution necessary in their identification. Red slates nearly in contact with the fossiliferous sandstone of Fales river seem to overlies it;

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while, a short distance up the river, a quartzite precisely like that of Whiterock is in cliffs; and a third quartzite has been traced east and west from the high falls.

In dark shales of the Horton series from the so-called coal mine of Lockhartville, Dr. Matthew has noted the occurrence of a *lepidodendron* with small arceoles raised in the middle like *L. Gaspianum* and *L. Chemungense*, probably on the borderland between Devonian and Lower Carboniferous, and resembling the flora of the Albert shales of New Brunswick, in which Dr. Ellis collected last summer two species of *Psilophyton* with *Lepidodendron Gaspianum*, *L. corrugatum*, *L. Chemungense* and other forms that go far to determine the Albert shales as Devonian.

In the lower series of rocks, however, in the neighbourhood of Whiterock and underlying the Silurian of Canaan, no fossils have been found but the trails and burrows of annelids mentioned in last report, and *Dictyonema websteri*, at Webster's mills on Moore brook.

Although in some cases the axes of the folds are clearly indicated by a narrow belt of quartz veins and a more coherent condition of the rock, the slates of this district are generally so cleaved and closely folded that even when well exposed in considerable thickness and over large areas it is only by the most careful inspection that they can be distinguished. From the road on the south bank of Gaspereau river at Whiterock, for example, northward as far as the mill near the end of the Deep Hollow, in a distance of less than one mile and a half across the strata, there are nine or ten anticlines and as many synclines. In any estimate of the thickness and geological age of these slates, the few fossils being, as already stated, obscure and referable to any horizon from Cambrian to Devonian, the working out of these folds is of the utmost importance, and in order to determine their structure certain conspicuous bands of quartzite were surveyed and mapped on a scale of twenty chains to one inch to confirm the evidence collected from the dip of the slates; but there is still much that is obscure and requires further elucidation. In and near the quartzite at several points there are stains, small veins and nodules or lumps of iron ore several inches in thickness but of no economic value.

In the millbrook immediately south of Kentville, quartzites, like those of the Spinney brook near Torbrook mines are interstratified with reddish and greenish-grey sandstone and slate, which have as yet yielded no fossils. South of them on the road to Canaan rocks like those of the *Dictyonema* series also bear a strong resemblance to the foregoing, but unlike them they include no quartzites. All are cut by diorite dikes and many beds show annelids. The resemblance in composition, texture and fossils of the rocks at Torbrook to the *Dictyonema* series farther east has been noticed by Dr. Matthew and others. This much seems to have been proved, that the Whiterock quartzite traced westward passes beneath the fossiliferous Silurian rocks of Canaan, which occupy a narrow, well defined belt between Elderkin brook and Gaspereau lake, and contain beds of limestone, some of which have been burnt for lime, and, in contact with the granite, have been converted into crystalline limestone or marble with obliteration of the fossils.

Only one of the two new shafts described last year as sunk at Torbrook mines has been used. The Leckie mine has been closed and the iron ore is now obtained from the mine at Fletcher Wheelock's. Professor J. E. Woodman has made a survey

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of this district, among others, for the Dominion government, so that it need not here be referred to. Professor Woodman spent some days at Whiterock in conference on the geology of this district, and was given tracings of as yet unpublished surveys near the mines and in the country eastward as far as Windsor; for some time he had also the assistance of Mr. Tufts in an examination of the sections along the streams of the neighbourhood of Torbrook mines.

DEEP BORINGS AT NEWVILLE.

During the summer, visits were made from time to time to the deep boring at Newville, described in the Summary Report for 1905, page 122, in order to obtain records of the strata passed through. Bands of unequal hardness in the prevailing conglomerate made progress slow and costly, so that on October 25, Mr. Fletcher was called to Halifax by the Premier and the Commissioner of Mines for Nova Scotia, to confer with Dr. Gilpin, Inspector of Mines, to meet a delegation and advise the government on the advisability of granting aid from the provincial treasury for the prosecution of this and similar borings in Pictou, Colchester and Cumberland counties in search of valuable seams of coal supposed to underlie a great thickness of Permian rocks and to be the continuation of the deposits worked at Stellarton, Westville, Joggins, Springhill and other mines. The borehole at Newville is cased to a depth of 1217 feet, below which for some distance the cable-drill was replaced by one of the government calyx-drills. As the work of the latter, however, in the conglomerate cost six or seven dollars a foot, and as it bored only fourteen inches a day, while the cable drill made twenty-five feet a day at a cost of seventy-five cents a foot, it was taken out and the hole was continued by the cable drill. The core obtained while the calyx-drill was at work shows a reddish-grey coarse conglomerate, composed of pebbles of quartzite, felsite, slate and other Pre-Cambrian rocks, the dip of which does not seem to exceed 7° ; and to the present depth of 2,180 feet the drillings indicate a similar conglomerate, hard to bore, but satisfactorily penetrated by the drill used cautiously in a hole six and a quarter inches in diameter, in which the core-drill can, it is said, be inserted to replace the cable-drill without great delay or difficulty should a favourable change take place in the strata. The water was shut off by piping, as stated above, to 1,217 feet, but another flow was met at 1,785 feet which was brackish and supposed to indicate a change of strata.

MACCAN COAL.

As the result of another examination in Cumberland county, a report was made on the mine of the Eastern Coal Company at Maccan station, where, as described in the reports of the Nova Scotia Department of Mines, a seam of coal most favourably situated close to the track of the Intercolonial railway, had been worked for some years at Smith's mine to a depth of 300 feet down a slope of 50° and by levels extending several hundred feet east and west from that slope, a considerable quantity of coal having been taken out to the rise. A new slope, sunk by Mr. Robert Archibald, C. and M. E., at an inclination of 30° , not on the full dip, showed at a depth of 135 feet a seam of coal with a section approximately as follows:—

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	Ft. In.
Coal.....	1 10
Shale.....	0 3
Coal.....	0 6
Shale.....	0 3
Coal.....	1 6
Shale.....	0 4
Coal.....	1 5
Shale.....	0 3
Coal with half inch of shale but otherwise clean.....	4 0
Shale.....	1 0
Coal.....	1 3
Total thickness.....	12 7

This section corresponds with that given by Mr. William Hall for the seam in the old Smith mine. The coal from the latter was found to be suitable for house, steam and domestic purposes, and Mr. Archibald, the manager, has no hesitation in saying that the mine can be profitably worked with a suitable plant so as to yield 500 tons of coal a day. This coal is supposed to be the seam worked at Chignecto mine and at Blenkhorn's mine. At the latter, the top coal, greatly improved, was mined in preference to the four-foot band of the above section upon which Mr. Archibald depends for his yield.

At Springhill mines in sinking the north slope to the 4,400 feet level it was found that the dip flattens to 17° or 20° . The other slopes are in good condition, the coal of the west slope being thick and of good quality.

On August 15, Mr. Fletcher visited Joggins to obtain information concerning old names of places in Sir William Logan's section of that coast, which is now being republished in the transactions of the Nova Scotian Institute of Science, together with other sections of the coast from Shulie to Spicer cove on the opposite side of the Shulie syncline, which are at present of great interest in connection with the search for coal beneath the Permian.

COPPER.

In this connection also it may be mentioned that the colour proofs of twelve sheets between No. 59 and No. 64, have been revised and the maps issued. On one of them, No. 61, there is shown the deposit of copper ore on the land of Mr. John Chisholm at Upper Pugwash, described in the Summary Report for 1902, page 166,* again visited on November 17, and a collection of samples sent to Ottawa. The ore is one of that class of deposits found in association with trunks of trees, leaves and other carbonaceous matter, as described in vol. V., part P, page 185, and other publications of the Geological Survey. It consists of stems and other parts of plants, in part carbonized, in part turned into copper ore, and containing, besides concretionary calcareous matter, barite, pyrite and other minerals. It is found usually in Permian rocks in bands

* Cf. also Sum. Reps. for 1888, page 28; for 1889, p. 29; for 1894, p. 94; for 1897, p. 101.

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of grey and reddish sandstone and concretionary limestone conglomerate, or as nodules in red and green marls. At Mr. Chisholm's pits above the bed of a small brook, some excellent copper ore was obtained from a belt, six to ten feet thick, which dips eastward at an inclination of 30°. On the published maps (e.g. sheets 46, 59 and others), belts of this ore are shown as traced for many miles through Pictou, Colchester and Cumberland counties. Many thousand dollars have been spent with but little success in intermittent attempts to mine and reduce the ores, the percentage of metal in the rock being too small for profitable treatment. The history of operations at Dorchester, N.B., of the Pictou smelter, and of the reduction works at Wentworth may be cited as examples. The prospects have, however, improved somewhat with the rise in the prices of copper, and a skilful, judicious test of some of the best localities, of the cost of mining and reduction and the value of the yield in metallic copper might, therefore, perhaps be recommended.

A little prospecting was done last summer on the small coal seam of Toney river in Pictou county, described in the report for 1890-91, page 133 P; but no improvement in the coal seems to have been discovered, and areas in this district can be regarded as valuable only in the event of coal being found by deep boring through these Permian strata.

At Auburn, Kingston and South Farmington in the Annapolis valley, Mr. H. Blackwell, of London, Eng., has bored several holes to a depth of more than 200 feet in search of coal, but none of them seems to have cut through the reddish coarse Triassic sandstone and grit and the white and greenish clay-shales, or to have been more successful than similar attempts referred to in previous reports.*

On the north side of Stewiacke river and east of the Smithfield lead mine (sheet 48), recent discoveries of iron ore are reported, by Mr. C. E. Corbett, of Springhill, along the contact of the Carboniferous limestone and the Devonian rocks and resembling the deposits of Brookfield, Bridgeville and other mines.

At the end of September, in company with Mr. Faribault, a visit was made to the Middle River gold mines in Victoria county, where an American company, represented by Mr. E. J. Foster, is about to thoroughly test the auriferous quartz veins found by Mr. W. C. Scranton near his camp on the Second Gold brook,** from which came most of the gold of the earliest washings at Middle river, as recorded in the report for 1882-84.

About the same time an examination was made of cores from a depth of 780 feet in a diamond drill boring on Peter brook, north of Baddeck bay. These consist of conglomerate and coarse sandstone which underlie dark calcareous shales, containing fish remains and *lepidodendron*, similar to rocks, described on pages 41 and 50 H of the report for 1882-84, which are not the productive coal measures, but underlie them as stated by Mr. Richard Brown in his 'Coal Fields of Cape Breton,' in reference to the coal of Hunters mountain.***

* Sum. Reps. for 1890, p. 41; for 1904, p. 295.

**Sum. Rep. for 1902, p. 393.

***Sum. Rep. for 1903, p. 173.

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PICTOU COUNTY.

On October 1, again in company with Mr. Faribault and his assistants, Mr. Fletcher visited the Dominion Exhibition, in Halifax, at which there was displayed, under the management of Mr. Harry Piers, of the provincial museum, an admirable collection of the raw and manufactured mineral products of Nova Scotia.

The borehole at Rear brook, opposite Trenton, in Pictou county, having been given up in conglomerate at 3,264 feet, without cutting coal, the Pictou Exploration Company is now considering the advisability of boring another hole at Granton, Little Harbour or Pictou.

At Greenwood a slope has been sunk and a little coal extracted for local consumption from the so-called six foot seam on one of the Barton areas, southwest of the Vale colliery.

On October 25, Mr. Fletcher went to Pictou on the invitation of the mayor and town council, to study with them the question of an increased water-supply for the town. The nature of the problem of an adequate supply upon this narrow peninsula of low elevation, through which passes an anticline and possibly also a fault, will be understood by reference to Professor Butler's report on the subject and to map sheets Nos. 44 and 46 of the Geological Survey. Sawmill brook, of course, offers an adequate supply of soft-water of inferior quality, liable to contamination, and requiring purification, but as an artesian supply was preferred and pumps installed, it is hoped that the present supply can be sufficiently augmented in the vicinity of the wells by checking leakage and waste, by damming the lower end of a marsh, and increasing the number of shallow, capacious wells, by boring one or more of the present wells to the greater depth suggested by Professor Butler, and by adding one or more holes farther north, the beds of red marl which yield no water being at the same time protected by piping from the friction of the pumping.

In 1902, after due consideration, the town adopted the present system of pumping into a stand-pipe from seven eight-inch wells bored along the millbrook and old beaver-meadow, near the Boars-back, for a distance of 1,371 feet, and ranging in depth from 93 to 298 feet. They all cut near the surface a thick stratum of sandstone from which most of the water is believed to issue; it is said by the engineer in charge of the pumping station that one of the shallowest, No. 5, 100 feet deep, can alone be depended on for a large supply, and the deepest was shut off by cement as useless below 166 feet. Nos. 1, 3 and 5 were, however, flowing wells showing strong pressure when first bored, and private wells in the neighbourhood seem to point to the probability that other water-bearing beds will be found below 300 feet. The supply for some time after the pumps were started was sufficient, yielding water for the Intercolonial railway engines as well as for the town. During the dry season of 1905, however, instead of a few hours sufficing, the pumps had to be kept going a much longer time to fill the stand-pipe, with a proportionately large consumption of coal. The water was also sometimes too impure to be used in the houses without filtering. In January, 1906, accordingly, the wells were cleaned out, obstructions and a large quantity of mud being removed. By this means the supply was restored, but it was still held to be insufficient for a projected system of sewerage and other growing needs, and during the dry autumn of 1906 fears

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were again entertained of a shortage. On a subsequent visit, however, on November 9, after a rainy season had filled the marshes and brooks, the water was found so plentiful that by seven hours pumping a day it could be kept up in the stand-pipe more easily than by seventeen hours pumping during the drought.

VOLCANIC TRAPS OF NORTH MOUNTAIN.

To assist in the classification and colouring of the volcanic rocks of the North mountain on the two sheets now ready for publication, Dr. G. A. Young spent ten days in this district, towards the end of October, investigating the trap rocks from Cape Blomidon westward. He also examined the dike-masses which cut the slates of Black river and Whiterock and took specimens of the curious oolitic, calcareous, sandy and argillaceous Silurian rocks of Canaan for microscopic and chemical examination; and it is hoped that his work in the field may be continued during the season of 1907 among these very interesting and easily accessible rock masses.

Owing to the kindness of Mr. William Salt, of Falmouth, who volunteered to accompany them for several days in November, Messrs. McLeod and Hughes were able to trace on the ground the course of the Hants-Kings county line between Eldridge settlement and New Ross road, and to connect their surveys with the line in order to facilitate the compilation of a map of this district. As it is essential that this and similar lines should be established beyond dispute by some unquestioned authority, and as the records of the Crown Lands Department at Halifax are sometimes meagre or incorrect, and the course and position of such lines ill-defined, it has been suggested that they might be surveyed once for all and established by authority of the provincial government, assistance being given by the officers of the Geological Survey, who could connect all crossings of rivers, lakes, roads and other lines surveyed by them.

On November 26, Mr. McLeod accompanied Mr. Harry Piers to New Ross, in Lunenburg county, to examine a discovery of cassiterite or tinstone reported to have been made at Lake Ramsay, by Mr. Charles Keddy, in a granite vein similar to those from which samples were collected by Mr. Faribault and described in the Summary Report for 1904, page 344.

GOLD FIELDS OF NOVA SCOTIA.

E. Rodolphe Faribault.

Mr. Faribault was engaged in office work at Ottawa from October 14, 1905, until June 19, 1906, when he left for Nova Scotia to resume his work in the field, on which he reports as follows:—

In accordance with your instructions, I left Ottawa on June 19, to resume the examination and surveys of the gold area to the north and west of Halifax. I was assisted the whole season by Messrs. J. McG. Cruickshank, Archibald Cameron and A. Tremblay.

WEST HALIFAX AND SOUTH HANTS COUNTIES.

The field work consisted principally in completing the revision of the topography and structural geology of the gold-bearing rocks lying along the Atlantic coast from Devil island in Halifax harbour to the East river of Chester, and extending inland to Elmsdale, Rawdon and Windsor, where my work joins with that of Mr. Fletcher. The surveys were undertaken with a view to preparing for publication the following eight map sheets: No. 66, Elmsdale sheet; No. 67, Waverley sheet; No. 68, Halifax city sheet; No. 69, Prospect sheet; No. 70, Aspotogon sheet; No. 71, St. Margaret's bay sheet; No. 72, Ponhook lake sheet, and No. 73, Windsor sheet.

The surveys of this region were made several years ago, but owing to insufficient help in the office they were compiled only during the last two years; hence the necessity of re-examining the region in order to revise the topographical features, and define more precisely the boundaries and structural geology of the rock formations.

The northeast half of the area covered by these sheets is, generally, underlaid by the quartzite ('whin') and slates of the gold-bearing series, while the southwestern half is for the most part covered with granite. To facilitate description the two areas will be dealt with separately.

GRANITE AREA WEST OF HALIFAX.

The boundary line between the two formations begins at Portuguese cove and runs northerly, in and out, along the western shore of Halifax harbour to near the head of the Northwest arm, where it leaves the shore in a northwesterly direction, crosses the Chain lakes and keeps about a mile south of the Hammond Plains road; thence runs northerly across Little and Big Pockwock lakes, to the north of which it zigzags through Island, West, Fales and Uniacke lakes, keeping a mile west of Mount Uniacke station; thence runs westerly to Lily lake and along the north end of Five-mile lake, passes half a mile north of King and Bog lakes, crosses the St. Croix river one mile below the outlet of Big Ponhook lake, passes a quarter of a mile south of Martock post office and crosses the Avon river five miles above the railway bridge at Windsor.

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From the above described boundary the granite extends south to the Atlantic shore, to Sambro, Prospect, St. Margarets bay, Aspotogon mountain and Mahone bay, and forms the eastern extremity of the largest granite area in Nova Scotia, extending to the southwestern end of the province, where it constitutes the backbone of the western counties. The country is for the most part very rough, with huge blocks and debris of granite, but it is generally well timbered with spruce, hemlock and some pine in the interior on the headwaters of the Indian, Ingram and St. Croix rivers, where lumbering is prosecuted on a large scale by the Dominion Lumber Company, with steam mills located at Ingram Port. It may be interesting to record here that this company has—it is said successfully—sown seeds of white pine in newly burnt up districts.

ECONOMIC MINERALS IN GRANITE.

Deposits of economic minerals have not so far been found in many places in the Nova Scotia granites, and nothing of importance has been discovered in the area under study, although many veins of quartz and dikes of pegmatite have been noticed, some of which are mineralized with pyrites, chalcopyrite, mica, tourmaline and fluor-spar, but so far as known, in no large quantities. At New Ross, fourteen miles farther west, on the continuation of the same granite ridge, pyrolusite, manganite, molybdenite, magnetite, argentiferous galena, zinc-blende, fluor-spar, tourmaline, kaolin and fire-clay have been observed at several places; tin-ore is also reported to have been found, but its occurrence could not be ascertained; and a vein of manganese, one mile west of Walla-back lake, was successfully worked for some years. From this it may be inferred that economic minerals may possibly be found here. Gold-bearing quartz has often been reported in the granite, notably at Ketch harbour, Sambro, Pennant harbour, Torrance bay and Hubley lake, but the reports, which could not be verified, must be regarded with suspicion. On the East river, St. Margaret bay, a quarter of a mile below Hubley lake, where the Halifax and Southwestern railway crosses the river, a pit was sunk to a depth of fifty feet in the early days of gold discoveries in Nova Scotia, on a quartz vein running north and south. It included pyrites and possibly galena, and was supposed to contain gold. A ten-stamp mill was built, but, so far as could be ascertained, not a trace of gold was recovered. The pit is now concealed by the bed of the railway, and nothing of the old works or the vein is visible.

The granite is generally coarse and porphyritic, of a light grey or reddish grey colour, but it is often finely crystalline and at times of a rich deep red colour and susceptible of a fine polish. It is generally well suited for building purposes as it splits easily into long blocks. It is much used in Halifax and is to be seen in all the bridges and culverts on the Halifax and Southwestern railway. The principal granite quarries are the Wm. Yeadon quarry and the John Kline quarry situated two miles west of Halifax. The other important quarries near Halifax are the Queen's 'Iron Stone' quarry in blackish altered ferruginous slate occurring near the granite on the west side of the Northwest arm, opposite Pleasant point, and the Beaver Bank slate quarry at Beaver Bank station, where bluish grey slate splits vertically along the cleavage plane on the apex of an anticlinal fold.

Three small isolated patches of altered quartzites and slates of the gold-bearing series not exceeding one mile in width and two miles in length have been observed

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in the midst of this granite area; one two miles west of Mount Fniacke station, along the Dominion Atlantic railway, on the west side of Five Island lake; another on the east side of Big Indian lake, half way to Sandy brook, in which a quartz vein was prospected for gold; the third occurs six miles south of Windsor, on the west side of the Chester road, at the outlet of Palmer lake.

Between St. Margaret bay and Mahone bay, on the peninsula extending south from Aspotogan mountain and Deep cove, the granite is succeeded by the gold-bearing rocks which spread southward to New Harbour and cover the islands lying south, including Big and Little Tancook, East Flat, Ironbound, Green and other small islands.

Small patches of Lower Carboniferous limestone, in some places associated with grit, sandstone and shale have been examined where they overlie the granite and the gold-bearing rocks on the shore of St. Margaret bay, at Redman hill, near Seabright, at the head of French Village harbour and at Boutilier station; also on Mahone bay, at Indian point and inland at a short distance east of the point; between Farm lake and the Halifax and Southwestern railway and at Coachman head on the shore between Deep cove and Blanchard, and on the west shore of Snake island. At the two last places the limestone is underlaid by the gold-bearing rocks and at the other places by granite. Much of the country along the shore is covered with lateral and terminal moraines and other deposits of granite debris and it is very probable that some of the limestone areas are larger than represented on the map and that other unobserved areas exist. At Indian point the limestone was extensively quarried for lime which was much used in Halifax some years ago, but it has not been worked for the last few years. Dr. M. Murphy, retired provincial engineer, informed me that it had been used for the old barracks and many of the oldest buildings in Halifax, and had stood the weather better than any other; that it was somewhat hydraulic and set quickly, but on that account it was hard to work and was not in favour with the builders.

GOLD-BEARING ROCKS NORTH OF HALIFAX.

As stated above, the northeastern half of the area revised for publication is nearly all occupied by the quartzite and slate divisions of the gold-bearing rocks, which extend northward from Halifax and the granite to Dutch Settlement, Enfield, the outlet and north end of Shubenacadie lake and Renfrew, thence easterly to Nine Mile river, northwesterly to Upper Rawdon, northeasterly to Indian Road and Barr settlement and thence westerly to West Gore. Rawdon, Upper Newport, Newport corner, Hartville and Martock, where it narrows down to a point between the granite and the Lower Carboniferous gypsum and limestone. To the north of this boundary the gold rocks are overlaid uncomfortably everywhere by the gypsum and limestone of the Lower Carboniferous, except along the foot-hills of Rawdon mountain, from Upper Rawdon to the Herbert river, where a narrow band of Devonian blackish and bluish-grey shale with occasional red layers occurs, overlaid by a great thickness of coarse and fine light grey sandstones, spreading to the northeast and surveyed by Mr. Fletcher. Between Upper Rawdon and Indian Road and between West Gore and Barr settlement are found in the dark shales small seams of coal which have been prospected at several places by shallow pits and a few bore holes. One of the coal seams reopened a few years ago

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in the Gore, yielded on analysis by Mr. F. H. Mason (Summary Rep. for 1904, page 299.)

Moisture lost at 110°C.	1.90
Volatile bituminous matter.	23.90
Fixed carbon.	49.40
Ash.	24.80
	100.00
Sulphur.	0.15

Evaporative power: one pound of dry coal will, upon complete combustion, evaporate 10.89 pounds of water. The coal burns with a long luminous flame, gives a compact coke and leaves a grey ash.

Grey sandstones were quarried to the north of the Gore mountain and were employed in the building of the Midland railway. Extensive deposits of gypsum occur at several places in the Lower Carboniferous limestone, principally to the east of Windsor, where it is extensively quarried, and in the vicinity of Elmsdale and Enfield, where it was also quarried, more especially for selenite, the crystallized gypsum, which occurs in large transparent sheets, notably at the Horne settlement, on the shore of Shubenacadie lake, and near the Shubenacadie river at Dutch Settlement.

In this section are included two areas of granite cutting through the gold rocks and comprised in the Waverley sheet. The eastern area is five miles wide and extends eastward from the head of Lake Major and Soldier lake to the edge of that sheet, beyond which it extends forty-eight miles eastward to Sheet harbour. The other mass is a small isolated boss, two miles in diameter, rising between Long and Fletcher lakes. The character of the granite is the same as that to the west of Halifax and no minerals of economic value have so far been discovered in them.

In close proximity to the granite the quartzite and slate are everywhere much altered, generally with developments of crystals of staurolite, andalusite, garnets and tourmaline, good specimens of which can frequently be found. At many places along the line of contact the granite is well observed to cut the quartzite and slate, into which it sends dikes and small veins, often along the bedding, and at times along the cleavage-planes, as well as across them. Good and interesting contacts are well exposed to the west of Halifax along the cuttings of the Halifax and Southwestern railway, between Chain and Bayer lakes, on the St. Margaret Bay road to the south of the first Chain lake, on the east side of the Birch Cove lakes and along the Dominion Atlantic railway west of Uniacke lake, where good illustrations of granite capping and altering the gold-bearing rocks may be observed.

Much time was taken up in defining more precisely the boundaries of the different rock formations and in this work I was especially assisted, for the greater part of the season, by Mr. Cameron.

STRUCTURAL GEOLOGY.

On account of the close and intimate relation existing between the occurrence of the gold-bearing veins and the anticlinal folds, it is of the greatest practical importance that the structure of the anticlines and synclines, the dislocations and faults, should be well defined on the map-sheets and sections, in order to help and encourage

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intelligent research in new districts where rich gold float has been found, and also to guide in the development of mines that are in operation. In view of the economic and scientific importance of this work great pains were devoted to it. In many cases to arrive at a satisfactory solution the same locality had to be repeatedly examined and surveyed. The difficulty is generally due to the slaty cleavage which is sometimes so much pronounced as to obscure and often obliterate the planes of stratification. I have much pleasure in acknowledging that the successful carrying out of this work is in no small measure due to the energy and zeal displayed by my assistant Mr. Cruickshank, who was engaged in this work most of the season.

The gold-bearing rocks of the region examined have been forced into a succession of folds, almost parallel to each other, bearing a general northeasterly and south-westerly course. A detailed description of the structure of these folds and the faults affecting them could not be followed intelligently unless accompanied by a map and would be too lengthy for this report; it must, therefore, be deferred until a complete report is published with the maps.

The greatest width of the gold-bearing rocks in Nova Scotia, measured at right angles to the folding, is forty miles along a straight line drawn from Three Fathom harbour to West Gore. A line drawn from Devil island, at the entrance of Halifax harbour, to Upper Newport would be thirty-eight miles in length, and would give a section of sixteen anticlines and as many synclines in the country examined. Of the sixteen anticlines, five are in the slate or upper division of the gold-bearing rocks which is generally not gold-producing, and eleven have brought up to the surface the quartzite ('whin') of the lower gold-productive division of the gold-bearing rocks. Out of these eleven anticlines, five have gold mining districts situated on them in the area under study; they are the Montague, Waverley, Oldham, South Uniacke, Mount Uniacke, Renfrew, on the one anticline, and the McKay Settlement gold districts. The structure of these districts has been surveyed in detail and large scale plans and reports have been published of them, excepting of the McKay Settlement district. The anticlines are, on an average, two miles and thirty chains apart; and the greatest intervening distance measured is four and one-half miles, between the Waverley and the Birch Cove anticlines.

A description of eight of the most important anticlines has already been given in the Summary Report for 1896, page 100. In this report the Birch Cove anticline is wrongly given as the continuation of the Montague anticline. A close and repeated examination of the locality has proved that the Birch Cove anticline, after crossing Bedford basin at the north end of Stephen or Navy island, runs easterly between Taylor and Enchanted lakes, north of Mitchell lake, crosses Lake Charles and the Waverley road one-quarter of a mile south of J. McDonald's house, Caribou bog and Lake Major, 200 yards north of the house of Fanny Gross (a negro), where quartz veins have been prospected, and is cut by granite one mile farther east. The exact location of this line may lead to the discovery of a new gold district to the east of Bedford basin, where very rich gold quartz was discovered along the cuttings of the I.C.R. Dartmouth branch, and was wrongly supposed to come from the Montague anticline much farther south. Instead of this, the Montague anticline after crossing the Waverley road at Brady's house, extends only one mile farther west, where the

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rocks flatten out, and it terminates by the beginning of a syncline running north-easterly half a mile north of the Montague gold district, and keeping the same distance north of the Montague anticline to the granite.

The anticlinal folds to the north of the Etter Settlement anticline, have not yet been fully described, but they were briefly mentioned in the Summary Report for 1895, page 112. Of these the Mount Uniacke and Renfrew anticline and the Gore anticline are, on account of the gold mines situated along their course, the only ones of special importance.

For information and assistance from miners and others, I wish to offer acknowledgments to the following persons:—Hon. W. T. Pipes, Commissioner of Public Works and Mines; Dr. E. Gilpin, Deputy Commissioner of Mines; R. McColl, Provincial Engineer; Jas. H. Austen, of the Crown Lands Department; Harry Piers, Curator Provincial Museum and Library; Prof. J. Ed. Woodman; Prof. F. H. Sexton; H. W. Johnstone, Assistant City Engineer; Capt. McInnes, Canadian Royal Engineer's Corps; A. A. Hayward, president of the Nova Scotia Mining Society; Fred. P. Ronnan, and Gerald B. Ternan, of Halifax; H. S. Badger, and E. Percy Brown, Goldboro; W. C. Scranton and E. J. Foster, Baddeck; W. J. Prisk, West Gore; Dr. D. Stewart, Bridgewater, in Nova Scotia; and Franklin Playter, Boston.

CHEMISTRY AND MINERALOGY.

Dr. G. C. Hoffmann.

Reporting on the work of this division Dr. Hoffmann says :—

‘The work carried out in the chemical laboratory during the eleven months ending November 30, 1906, has been, conformably with the practice of former years, almost exclusively confined to the examination and analysis of such minerals, ores, &c., as were considered likely to prove of economic value and importance. Briefly summarized it embraces :—

1. ANALYSES OF FOSSIL FUELS.

Lignite—

Sections 27 and 28, township 53, range 7, west of the fifth initial meridian, Alta.
 Forgetmenot ridge, north of Elbow river, Alta.
 Bragg creek, Elbow river, Alta.
 Pembina river, Alta. (3 seams.)
 Said to be from northwest of Cumberland lake, Sask. (?).
 Tantalus butte, Ykn.
 Quilchena creek, Nicola valley, B.C.
 Similkameen river, B.C.

Lignitic Coal—

Taber coal mines, Alta.
 Valley east of Elk lakes, Elk river, B.C.

Coal—

Mabou coal mine, Inverness county, N.S.
 Rear brook, East river of Pictou, N.S.
 Cariboo cove, Richmond county, N.S.
 Bragg creek, Elbow river, Alta.
 Fish creek, Bow river, Alta.
 Sheep creek, Highwood river, Alta. (3 seams.)
 Crowsnest pass, near Frank, Alta.
 Elk River tributaries, East Kootenay, B.C. (2 seams.)
 Indian reserve, Nicola valley, B.C.
 Okanagan lake, B.C.
 Whitehorse coal fields, Ykn.
 Lewes river, Ykn., Tantalus coal mine.
 “ Five Finger mine.

Anthracitic coal—

Coxcomb mountain, and south of Jumpingpound river, Alta.
 Bragg creek, Elbow river, Alta.
 Canmore collieries, Alta.
 Whitehorse coal fields, Ykn.

Semi-Anthracite—

Sheep creek, Highwood river, Alta. P. Burns' mine.

Anthracite—

Whitehorse coal fields, Ykn.

2.

IRON ORES.

Magnetite—

Mansfield township, Pontiac county, Que.

Homer township, Thunder Bay district, Ont.

Hematite—

Dunham township, Missisquoi county, Que.

Northeast of Wabinoash river, Thunder Bay district, Ont.

Clay iron stone—

Falmouth township, Hants county, N.S.

3.

ANALYSES OF LIMESTONES AND DOLOMITES.

Morrison's mill, Sydney river, Cape Breton county, N.S.

Walton, Hants county, N.S.

Tennycap manganese mine, Hants county, N.S.

Montcalm township, Argenteuil county, Que.

4.

ANALYSES OF NATURAL WATERS.

Cambridge township, Russell county, Ont. From an artesian well.

Shuswap river, Yale district, B.C. From a spring.

5.

EXAMINATIONS AND ANALYSES OF CLAYS.

Litches creek, Cape Breton county, N.S.

Whitefish river, Abitibi district, Que.

Hull township, Wright county, Que.

Section 14, township 2, range viii., west of the second initial meridian, Sask.

About twenty miles south of Moosejaw, Sask.

Northwest of Cumberland lake, Sask.

Section 9, township 31, range xxiii., west of the fourth initial meridian, Alta.

Taber, Alta.

Section 15, township 29, range xxiii., west of the fourth initial meridian, Alta.

Section 32, township 30, range iii., west of the fourth initial meridian, Alta.

Near Duck station, Yale district, B.C.

6.

MISCELLANEOUS EXAMINATIONS.

Carbonaceous Shale—

West bay, Inverness county, N.S.

Inverness, Megantic county, Que.

Abitibi district, Que.

Graphite, Disseminated—

Suffolk township, Labelle county, Que.

Ramsay township, Lanark county, Ont.

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Graphitic Shale—

Frenchvale, Cape Breton county, N.S.

Infusorial Earth—

Pukaist creek, Thompson river, B.C.

Near the mouth of Wood creek, Highland valley, Yale district, B.C.

Marl—

Gloucester township, Carleton county, Ont.

Kinloss township, Bruce county, Ont.

Furlong lake, Rainy River district, Ont.

About fifty miles northwest of Edmonton, Alta.

Petroleum, Crude—

Biddiwell township, Manitou island, Ont.

Sand, Siliceous—

Oneida township, Haldimand county, Ont.

Cullross township, Bruce county, Ont.

Sand, Black—

Big Bar, Fraser river, B.C.

Sandstone—

Wallace, Cumberland county, N.S.

Dorchester, Westmorland county, N.B.

Silt—

Northwest of Cumberland lake, Sask.

The number of mineral specimens received during the period in question for examination or analysis amounted to 741, the number of letters written amounted to 292 and the number of those received to 109.

The regular Annual Report entitled 'Report of the Section of Chemistry and Mineralogy' for the past year is now in the press.

The accomplishment of the work above outlined is very largely due to the active co-operation of assistant chemist and mineralogist, Mr. F. G. Wait, who has uniformly evinced a real interest in the work of the laboratory, and closely and unremittingly applied himself to the same.

Additions to the mineralogical and lithological section of the Museum during the period in question included specimens of anhydrite, chalcedony, cobaltite, disseminated graphite, gypsum, infusorial earth, marl, native copper, nodules of cassiterite, obsidian and pyrite crystals.

A cast of the Iron Creek meteorite has also been added.

Acknowledgments are due to the following gentlemen for presentations to the Museum :—

Boisse, Meynard and David, North Stukely, Que., per 'The Forsyth Granite and Marble Company,' of Montreal, Que.—Two large polished slabs of marble from lots 10 and 11, ranges E and F of Orford, Sherbrooke co., Que.

Donovan, P., Wanapitei, Ont.—A crystal aggregate of pyrite from Wanapitei, Ont.

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Herchmer, F. K., Lake Dauphin, Man.—Salt, common, from Salt point, Dawson bay, Lake Winnipegosis, Man.

Holland, Mrs. George, Ottawa, Ont.—A fine specimen of obsidian from the Yellowstone National Park, Wyoming, U.S.A.

Mickle, Prof. G. R.—School of Practical Science, Toronto, Ont.—Crystals of cobaltite, loose and in the matrix, from Cobalt, Coleman tp., Nipissing dist., Ont.

Sohier, M. L., per E. R. Faribault, B.A. (Survey).—A specimen of veinstone from the Maisonneuve mine, Berthier co., Que., holding small quantities of some minerals of the rare earths.

Stevens, A. P., B.Sc.—A specimen of slate from lot 4, range x., Dominion tp., Missisquoi co., Que.

'The Canadian Metal Company' of Frank, Alta.—An ingot of spelter, being the first zinc smelted in Canada. The ore employed being obtained from the silver-lead mines of the East and West Kootenay districts, B.C.

'The Forsyth Granite and Marble Company,' Montreal, Quebec.—A polished tablet of Canadian Verd-Antique marble.

Walters, H. L., per L. Lambe (Survey).—Specimens of native copper from Mussel creek, three miles and a half up Horsefly river, Cariboo district, B.C.

Weeks, Fred. M., Hedley, B.C.—Nineteen samples of ore from the Nickel Plate Mine, Hedley, B.C., and eight samples of ore from the Kingston mine, also at Hedley, B.C.

C. W. Willimott.

'During the early part of the year I was chiefly engaged in arranging mineral collections for educational institutions. Of these collections, the size of which has been increased by fifty per cent, twelve were despatched to various applicants.

I visited a number of localities in the provinces of Ontario, Quebec, Nova Scotia and New Brunswick for the purpose of securing minerals for the completion of collections.

According to instructions I returned to Ottawa at the end of August and prepared a collection of economic minerals for the Central Canada Exhibition. The exhibit was prominently installed in the main building and attracted a great deal of attention. During its installation I was ably assisted by Mr. A. T. McKinnon and Mr. D. A. Esdale.'

M. F. O'Connor.

'In addition to an examination of the many hand specimens that have been brought for identification, the following analyses and assays have been made by me during the year :—

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ORES.	CLAYS.	COALS.	IRON ORES.	NICKEL ORES.	COPPER ORES.	LEAD ZINC. ORES.	GOLD & SILVER ORES.	PLAT- INUM METAL.	TOTALS.
Character of determin- ations.	Com- plete analyses.	Prox- imate analyses.	Six com- plete. Twenty- nine partial.	Nickel metal.	Copper deter- mina- tion.	Partial.	Gold and silver.	Metal.	
No. of deter- minations...	38	80	129	7	5	14	207	12	492
No. of samples	5	20	35	7	5	18	126	11	227

MINES SECTION.

E. D. Ingall.

During 1906 the work devolving upon the section has been, as formerly, along two lines, viz., the Technology and Mining Records and the Statistics.

Along these several lines the main effort consists in gathering as complete data as possible relating to the economic mineral resources of the country and their exploitation. The information sought is naturally of a very varied nature, and is gleaned from every available source.

Through a clipping system, information of a tentative nature is obtained from the technical and general press. Much of this can, of course, only be used as a basis of further inquiry necessary for corroboration and for the obtaining of more extended data.

The proceedings of the technical societies, both American and British, are also searched, and reference card indexes kept, so that for any given deposit, district or industry, all the information available to date may be easily obtained whenever need arises.

A general reference index of the literature of mining and metallurgical processes is also kept, by selecting from that issued by the *Engineering* magazine, mounting on cards and filing away in drawers. The information thus gleaned is mainly of two kinds, which might be classed as permanent and ephemeral. In the former would be included the geological features of occurrence of economic bodies of mineral with all available plans and maps of mines, &c., the nature, qualities and composition of the ores, &c.; their fitness for various purposes and all those varied and voluminous details generally comprised under the designation of Technology and Mining Records. Under the latter heading would come all those features, to a large extent statistical, illustrative of the condition and results of mining and smelting operations for the current year.

The obtaining promptly of complete statistical data illustrative of the production, exports and imports—consumption and markets, &c., for all the varied mineral industries of the country is a very difficult task. Circulars are sent out at the end of the year to all operators, and to those who do not reply in a reasonable time reminders are sent, followed later and where necessary by telegraphic requests.

Based upon the results thus obtained, supplemented by close estimates where data are lacking, an itemed advance statement of the mineral output, imports, &c., is compiled shortly after the lapse of the year dealt with. This pamphlet, which also gives a short résumé of the general progress in each industry, was issued for 1905 on March 2, 1906.

The complete and final figures for the compilation of the detailed statistical report of the mineral industries are not available until well on in the year following

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that under consideration, so that with the necessary work of revision and compilation it cannot be ready for press until toward the close of the year.

Among other things demanding considerable attention on the part of the staff of the Mines Section is the answering of inquiries on all kinds of technical matters pertaining to the mineral deposits and mineral industries of the country. These are often so extended in their scope as to require considerable time for their preparation.

The staff of the section remained unchanged during 1906, consisting of Mr. E. D. Ingall, the mining engineer in charge; Mr. Théo. Denis, assisting, especially in the technological work; Mr. Jno. McLeish, having especial charge of the collection and preparation of the mineral statistics, and two lady assistants.

Besides the general office duties as above set forth, the time of the staff is also occupied as time permits in the collection, both from the technical literature available as well as by personal visits to mining districts, of complete information regarding various mineral deposits and classes of ores looking to the continuance of the series of bulletins on the mineral resources of Canada, of which many have already been issued by the Geological Survey.

In this connexion, field studies were made by Mr. Ingall and by Mr. Denis, and résumés of the results of their work are given below.

For about two and a half months during August, September and October, Mr. Ingall was engaged visiting various points in eastern Canada, with a view to collecting further information regarding the progress of exploration and exploitation of the copper deposits of that portion of Canada. Below is given a concise résumé of the points observed by him in the course of this field work.

As a result of the high price of this metal during the year very considerable interest was taken in any new discovery, or older mine promising to develop into a paying concern.

Throughout the eastern provinces of the Dominion, inclusive of Quebec and Ontario, the known copper ore deposits are quite numerous, and in past years many of them have been considerably developed. For many years past, however, the actively working mines producing this metal have been comparatively few considering the great extent of the country comprised and the very numerous occurrences on record. In Nova Scotia and New Brunswick there have been no permanent producing mines for very many years. The production of Quebec for a long time past has been represented by the copper contents of the pyritous acid ores of the Capelton and Eustis mines, while in Ontario, apart from the output of the nickel-copper mines of Sudbury, no steadily producing mines have been in operation, although much interesting development work has been in progress at various points.

From an inspection of the published figures of copper production in Canada it will be noticed that the whole production of the east has only constituted a proportion of from about 14 to nearly 27 per cent of the whole, and that apart from the copper produced at the Sudbury mines, the rest has, for the period covered, never risen to over a quarter of a million dollars worth.

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Copper in eastern Canada occurs nearly altogether in the form of sulphuret ores, although in certain districts in Nova Scotia, New Brunswick and on the shores of Lake Superior in Ontario native copper-bearing areas are known.

Whilst in some cases the sulphuret ores carry silver and gold values, the presence of the precious metals has not been a constant feature.

The ore deposits of the maritime provinces have been well described in the Copper Bulletin issued by the Survey in 1904, and prepared by Dr. R. W. Ells. Since the issue of that publication there is little new to note, and although efforts have been made to further develop some of the already known deposits, these provinces remain as yet in the list of non-contributors.

In Quebec the main feature of the copper producing industry is still, as for a long period of years, to be found in the operations at the Capelton and Eustis mines. At these two points lenses of pyrites carrying copper as an accessory constituent are exploited and the ore is utilized primarily in the production of sulphuric acid. These lenses, which are inclosed in schistose rocks in a comparatively flat attitude, have been developed to depths measured on the dip of over 2,000 feet, although their greatest longitudinal dimensions would be approximately 200 to 300 feet.

At the Eustis mine the operations are now carried on by electric power. The ore is raised by means of an electric hoist to the level of the long crosscut tunnel where it is loaded into mine cars. These are hauled out by an electric motor which takes them down the hill to the newly installed mill which is situated near the track of the Boston and Maine railroad. Here, by means of a plant of rock-breakers, rolls, screens and Wilfley tables, the ore is treated so as to produce a grade suitable for shipping, in which condition it is forwarded by rail to the acid works of the company in New Jersey.

At the Capelton mines the acid works and chemical plant form the main feature. Ore, partly from the Company's own mine adjacent to the Eustis already mentioned, and partly acquired by purchase, is burnt in the acid works, and the cupriferous cinder is smelted in a small cupola, and the matte, which also carries the slight silver contents of the ore, is shipped to the Nichols Chemical Company's works in New Jersey, U.S.A., for further treatment.

Thanks are due to Messrs Blue and Eustis, of the Eustis mine, and to Mr. W. L. Spafford, of the Capelton mine, for courtesies and assistance rendered during the visit made to their mines.

The copper ore deposits of Quebec attracted attention at a very early date in the history of the country, and in past years considerable development work was done at a number of points. These historic ventures have been practically all confined to what is known as the Eastern townships, or the district lying south of the St. Lawrence river, and east of Montreal.

These deposits occur mostly in an older schistose series, although some of those worked in the past have been in limestones. The ores obtained throughout the district mentioned have been either similar to those mined at the Capelton and Eustis mines, viz.: cupriferous pyrite, or in contrast, copper ores proper have been the prominent feature, chalcopyrite and bornite being the most frequent.

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Whilst none of this latter class have been continuously working for many years, fresh interest is beginning to be taken in them, as evidenced by exploratory and development work now going on at various points.

Chief amongst these may be mentioned the Ascot and the Suffield mines. In both cases the work has been prosecuted by small forces of men in continuation of that done years ago and abandoned. At the Ascot, under the management of Mr. McCaw, further underground developments were made during the year and some shipments of ore from the old dumps were made to Capelton.

At the Suffield mine development work is in progress under the direction of Captain Wm. Jenkins for the owner, Mr. A. O. Norton, of Coaticooke. At this place the intention has been to trace the ore-bearing belt and to block out ore in the mine, leaving the extraction of ore in quantity until some future date.

The two last mentioned mines are examples of the deposits yielding copper sulphurets proper, and the average of the copper contents is claimed to be high, whilst their value is said to be enhanced to the extent of from \$5 to \$8 by the presence of the precious metals.

At another of the older mines which was visited and which was famous in past years for its yield of high grade sulphurets, viz., the Acton Mine, a couple of men were employed following some of the leaders of ore in the walls of the old pits. It was said to be in contemplation to operate this mine again on an extensive scale. Mr. J. E. Marcile, M.P., and Dr. F. H. Daigneault, M.P., are interested in the enterprise.

Search for new bodies of pyritous ores was reported as active in the district of which Sherbrooke is the centre, but time only permitted of visits to a few points among which may be mentioned the work proceeding under the direction of Dr. Foss of Lennoxville. At this point, which lies about half a mile westerly from the old Moulton Hill mine, the test shaft was down about twenty feet at the time of the examination, and showed a belt of highly pyritiferous schist for the full width of eight feet of the shaft. This property would apparently come within the category of the acid pyritous ore bodies before mentioned.

In Ontario copper ores of two distinct classes are known. Native copper bearing rocks of Keeweenawan age, and therefore similar in a general sense to those of the famous native copper mines of Michigan, occur as small fringing areas at isolated points along the eastern shores of Lake Superior. They also constitute the large islands of Michipicoten and those forming the barrier chain across the mouth of Nipigon bay, as well as the outer end of the peninsula between Black and Nipigon bays.

Considerable mining developments were made in this series at Mamainse point and Michipicoten island, but without ensuring permanent success. For many years little has been done further towards the settlement of the question as to whether deposits may not be found to exist in as yet unexplored portions of these areas which will be profitably workable.

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Apart from the above-mentioned, the expectations of this province in respect to copper lie in the sulphuret ore deposits known to exist at very numerous points in the older rocks underlying all the northern part of this province.

The copper resulting from the operations at the famous Sudbury mines has already been spoken of and has practically constituted the whole output of the province for many years.

An interesting feature of this year's operations consists of the re-opening of the old group of mines on the north shore of Lake Huron at Bruce Mines, which were so extensively worked from 1846 to about 1875. The ore occurring here is chalcopyrite in a series of large quartz veins which cut an area of intrusive diabase of considerable extent.

Numerous bodies of cupriferous sulphurets have been located throughout the stretch of country bordering the shores of Lakes Huron and Superior; they extend easterly as far as the head of Lake Timiskaming and westerly as far as the Lake of the Woods district. They generally occur in the areas of schistose and other rocks which are distributed throughout this extensive territory as well as in veins cutting the overlying series of the Huronian proper.

Speaking in a very general way it may be said that the ore-bodies of the Keewatin schistose series often present much resemblance to those already mentioned as occurring in Quebec. They frequently occur in interfoliated lenses, in some of which the ore might be classed as pyrite with accessory copper whilst in others the ores are sulphurets of copper proper.

Attention is being turned to the development of these deposits at a number of points located between Sudbury and Sault Ste. Marie, Ont.

On the occasion of the visit paid to the Massey mine a few miles north of the village of that name, it was found that the work which had been prosecuted for some years had been suspended. At this mine two adjacent lenses of ore occurring in a series of schists often very quartzose, were explored to a depth of 500 feet for a length along the strike of about 250 feet.

Ore croppings have been located on this belt, which has an easterly and westerly trend, for several miles on either side of the above mentioned mine. Extensive developments have been made and are still in progress on the Herminia properties on its westerly extension, one of this Company's mines being located about two miles, and one about three miles from the Massey. The farthest or No. 3 shaft is equipped with a complete hoisting and air-compressing plant, and the intention is to sink a considerable depth and open the ore-body by drifts before contemplating any extraction on a large scale.

Farther west along the Algoma branch of the Canadian Pacific railway, work is progressing at the Dean Lake mine, situated about eight miles westerly from the town of Blind River. This point is interesting in that the ore, which is chalcopyrite and bornite, occurs in the flat lying sedimentaries of the original typical Huronian series which is here represented by the red quartzites and by slate conglomerate with the usual disseminated pebbles. The mine is equipped with hoist and air compressor; the main working consists of a shaft which was 110 feet deep at the time the exam-

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ination was made. Besides this, surface croppings of ore had been opened up for a distance of over 1,000 feet. Development work was said to be progressing on a copper ore property in the vicinity of Echo lake, but this point was not visited, nor did time permit of a personal examination of many other rumoured discoveries and operations in this district.

A number of interesting sulphuret deposits located northerly from Sault Ste. Marie have received considerable attention for some years past. The existence of copper ores in the vicinity of Goulais and Batchewana bays has been known since the days of the earliest explorers, and it is interesting to note that similar deposits have been located farther inland. Upon some of these, during recent years, considerable development work has been done, amongst other places, at the Eagle Copper Company's property in Vankoughnet township and at the Superior Copper Company's property. This section has been rendered more accessible by the construction of the Algoma Central railway, and the latter mine is reached by a road four and a half miles from Birch Camp station on that line. This mine has been equipped with a hoisting and power drill plant. Along a length of the ore belt of some 2,000 feet in length, six test-shafts have been sunk, the deepest attaining to over 250 feet. Development work was in progress during 1906. Between these mines at the eastern end of Lake Superior and Lake of the Woods are many areas of the Keewatin rocks, in which, at a number of points, deposits of pyritiferous copper ores have been located, but upon which little or no work has been done for a long time.

At the Tip-Top mine, however, work was in progress during 1906 with a force of ten to fifteen men, for Colonel Ray of Port Arthur, who acquired possession of the mine in June, 1905. At this mine, from information, reports and plans kindly loaned by Colonel Ray, including tests of car-load lots, and assay returns from sampling of the mine, there would seem to exist a body of ore of good grade. This has been followed in depth for over 200 feet and for about 150 feet in length by means of drifts at three levels.

The foregoing remarks have been largely confined to the portion of the country visited by Mr. Ingall and to actually operating properties. When the large number of the known deposits of copper ore throughout eastern Canada is considered, as well as the wide distribution of extensive areas of the copper-bearing formations and the present high prices of copper, it is reasonable to hope that the immediate future may see a great growth of the copper mining industry. This hope is also sustained by evidences everywhere of enterprising efforts to place many hitherto idle deposits on a paying basis. During the summer very efficient aid was rendered by Mr. Percy Marshall.

WESTERN OIL, GAS AND COAL FIELDS.

Theo. Denis.

Mr. Denis left Ottawa at the end of May, with instructions to proceed to the oil and natural gas districts of western Ontario for the purpose of bringing up to date the records of the Mines Section on these subjects, and to confer with the operators as to the best means of keeping in touch with the development of the industries, such as obtaining logs of wells, and reliable information as to relative importance of new fields, &c., and to ascertain in what shape all the data we possess could be compiled and published so as to best meet the needs of the public. Some new and very important information was gathered, and the Mines Section intend to publish as soon as possible a bulletin giving a systematic presentment of all data concerning these subjects. The bulletin will also include descriptions of the western oil fields and operations.

On the 18th of June, with further instructions, Mr. Denis proceeded westward, to investigate the development of the oil and gas fields and of the coal mining industry. With the additional information thus obtained during the season, the Mines Section will publish a bulletin on 'Coal in Canada,' giving a short description of the coal fields and collieries. These bulletins are intended to give in a popular form information concerning the various branches of Canadian mineral industries. It is believed that they will also be useful in acquainting operators in the various fields with the conditions and methods of other districts. They will be liberally illustrated with reproductions of photographs, sketch maps, &c.

It is now more than fifteen years since attention was brought to the occurrences of oil in the region of the South Kootenay pass, by Dr. Selwyn, in the report of the Geological Survey for 1891, but it is only since 1902 that boring operations on a comparatively large scale, were undertaken. At the time of my visit in July, 1906, there were five companies working actively in the district, as follows:—

The Western Oil and Coal Company, Limited, offices at Vancouver, B.C., have two drilling rigs in operation, one on Pine creek, in township 2, range XXX, west of 4th meridian, and another on the shore of Upper Waterton lake, in township 1, same range. One of the wells on Pass creek is said to have struck a fair quantity of oil; it is claimed that it could pump fifteen to twenty barrels a day, but owing to the lack of transportation facilities, the Company was not producing at the time. On Waterton lake, a depth of 1,800 feet had been reached. The intention was to go to 2,000 feet and to move the rig to a point near the mouth of Oil creek, about one-third of a mile from the first well.

The Rocky Mountain Oil Development Company, office at Pincher Creek, are operating on the Alberta side of South Kootenay pass, on Oil creek, at Oil City. One well struck oil at a depth of 1,080 feet, and for some time flowed by itself. Some 200 barrels of oil are stored in galvanized iron tanks erected near the well. A small still has been contrived and produces gasoline, kerosene and lubricating oil for the

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use of the camp and surroundings. The illuminating oil is of a very good quality, and burns without soiling the lamp chimneys.

The well has been capped and is held in reserve until there are better shipping facilities. It is said that it would pump fifteen to twenty barrels per day. The Company was putting down another hole some 1,500 feet higher up the creek.

There seems to be but little room for doubt that all the above wells, as also the one being put down by the S. E. British Columbia Land and Oil Company subsequently referred to, start at the surface, in strata of Cambrian age, or older, which have been thrown over younger formations of Cretaceous age, by a huge overthrust fault.

In the Report of the Geological Survey for 1898, Dr. G. M. Dawson, referring to the numerous seepages found in the region of both sides of the divide, expresses himself as follows:—‘The indications certainly seem to be sufficiently promising to warrant some outlay in work of this kind (boring operations) notwithstanding the generally disturbed and broken character of the formation of the region.’

It has also been suggested that the older strata, which, owing to the overthrust, overlie the Cretaceous measures here, could act as the impervious cover necessary for the gathering of the oil, and that petroleum exists in the contact zone.

The Canadian Northwest Oil Company, office at Pincher Creek, Alta., are working farther north on the south fork of the Oldman river, eighteen miles directly west of the town of Pincher Creek. This company controls several sections in township 6, range III., west of the 5th meridian. In July, 1906, they were preparing to put down a bore hole on section 15 of the above township, and the greater part of the machinery was on the ground at the time.

This location is at the base of the foothills, some fifteen miles east of the summit, and the surface rocks are here referable to the Upper and Middle Cretaceous.

The Canadian Pacific railway is also undertaking a deep boring test near Medicine Hat. They have established a boring rig at Dunmore junction, and intend to put down a well to 3,000 feet. These operations are under the immediate supervision of Mr. Eugene Coste.

The result of these borings, which are 170 miles apart, will be awaited with great interest; but there still remains a large territory yet untested, to the south of the railway, where chances of striking oil might be equally good. The superficial covering is so thick and so uniform that very little information as to the underground contours can be obtained. It is to a great extent a matter of onerous testing by bore holes.

The S. E. British Columbia Land and Oil Company, offices at ‘The Dell,’ Oregon, is operating on Akamina creek, four miles west of the summit of the South Kootenay pass. Work was begun in the spring of 1906 with a rig which was brought in across the line from Montana. In the first week of July the boring had reached a depth of 800 feet.

Another company, the Canada Western Oil Company, office at Greenwood, B.C., has control of 620 acres on Kishehena creek, which is practically the lower part of Akamina. They intended to begin operations this summer.

ATHABASKA RIVER.

A few years ago the Geological Survey put down a bore hole on the Athabaska river, at Pelican portage, some 125 miles from Athabaska Landing. At 800 feet the drill struck a strong flow of natural gas, and drilling operations were abandoned. The flow continued and the well has been burning since. Owing to reports on the part of travellers and traders, that the flame attained great heights and that a large supply of natural fuel was going to waste, Mr. Denis was instructed to make a thorough examination of the well, and to report on the advisability of taking steps towards extinguishing it and plugging it at the seat of the casing.

On examination it was found that the reports had been greatly exaggerated. The gas escapes out of the ground through a four-inch pipe, and the flame, by actual measurements, taken on the second of August, in calm weather, did not exceed a height of fifteen feet. According to the storekeeper for Messrs. Revillon Brothers at the Portage the well has repeatedly been extinguished and relighted by Indians and bushmen, showing that this operation does not present much difficulty.

From all appearance the casing is in bad condition. It is improbable that anything would be gained by stopping the flow of gas. The well is comparatively shallow, and if the previous reports as to volume of flame had any foundation, then the well is decreasing at a rapid rate, either owing to exhaustion of the gas pocket, or the partial filling up of the bore hole, by the caving of the sides.

The effect of this escape of gas on an underground supply would, moreover, be insignificant as compared with the escape from 'natural gas springs,' which occur at several places lower down the Athabaska river, and which certainly have the same origin, and come to the surface through fissures in the rock. Of these, Mr. McConnell in his report on the district says, that 'Some of the jets burn steadily when lighted, until extinguished by heavy rains or strong wind, and afford sufficient heat to cook a camp meal.' When it is realized that this has been going on for geological ages, within a few miles of the Pelican Rapids well, the quantity of gas which has come out of this bore hole is entirely insignificant.

During the course of the summer, two drilling rigs were shipped down the Athabaska to bore for oil in the vicinity of Fort McMurray. The results of their operations will be awaited with great interest.

The following short account of the development of the western coal industry during the past year is given as the result of a visit to the various fields:—

The coal industry along the Crow's Nest branch of the Canadian Pacific railway is developing very quickly. At Taber, some thirty miles east of Lethbridge, the Reliance Coal Company, which started work about a year ago, have now a very complete surface plant and are placing coal on the market. The Taber Coal Company have improved their plant, and are now in a position to produce 300 tons a day.

At Lethbridge, the Alberta Railway and Irrigation Company (late Alberta Railway and Coal Company) have extended their workings under the valley of the river. They are continually introducing improvements and additions at their colliery, the latest being a new Rand compressor with a free air capacity of 3,300 cubic feet a minute.

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The Diamond Coal Company are at present starting to develop a colliery six miles north of Lethbridge on the opposite bank of the river. The intention of the Company is to develop the property for the next eighteen months, at which time the new Canadian Pacific Railway bridge spanning the valley is expected to be completed and will bring the line of railway within a short distance of the mine.

At Lundbreck the Lund-Breckenridge Coal Company's mine, which was only in the development stage last year, is now the centre of quite a large settlement. It has a very complete and up-to-date surface plant, with a steel head frame sixty-five feet high. The mine only began shipping in April and has now an output of 150 to 200 tons a day. The capacity of the screens is at present 500 tons, but it is capable of large extensions.

At Frank, the Canadian-American Coal Company's principal addition to their surface works is a tippie which is now in course of construction and is designed to handle 2,000 tons a day. The main entry is now in 8,600 feet.

The Hillcrest Coal and Coke Company, whose mine is situated southeast of Frank, Alberta, on section 18, range III., township 7, west of the fifth meridian, started development in September, 1905, and the first shipment of coal was made in March, 1906. They own a spur of standard gauge railway two miles long, connecting the tippie with the Canadian Pacific railway, and have now a production capacity of 200 tons a day.

The West Canadian Collieries Company, offices at Blairmore, who have the only installation in the west of mechanical coke ovens (a set of Belgian ovens of the Bernard type), had been rather troubled by the high contents in ash of their coke. They have installed at Lille a splendidly equipped washer, designed to wash all coal sent to the coke ovens under three-quarters of an inch in size, with the result that the ash in the coke has been reduced by one-half. The washer comprises Lubrig jigs and Spitzkatsen, and can treat 300 tons in a day of ten hours; all the labour in connection with it is performed by one man at the engine and one labourer. Both collieries, Lille and Bellevue, were working steadily all the year.

At Coleman, the International Coal and Coke Company are building ninety additional coke ovens of beehive pattern. This will double their capacity. The colliery has a very up-to-date plant and a steady output.

On the British Columbia side of the Crowsnest pass the coal industry has been very active. One of the noteworthy features is the start which the Canadian Pacific railway is making to mine coal at Hosmer, a station on the railway about eight miles north of Fernie. The work, up to July, had mainly been of a prospecting nature, but there seems to be little doubt that an important colliery will soon be added to those of the Crowsnest pass.

The Imperial Coal Company, who own some coal lands on Fording river, a tributary of the Elk river, above Michel creek, have begun surveys for a line of railway to tap their areas.

So far, the only producing coal company of the Crowsnest Pass field, is the Crow's Nest Coal Company. This company has two collieries working actively, at Coal creek and at Michel, and a third one at Carbonado, on which a great deal of work

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has been done, but which is not producing at present. The year's main improvements at these two collieries have been the completion of a steel tippie at Coal creek, designed to handle an output of 4,000 tons in 10 hours, and the installation of compressed air haulage at the Michel colliery to replace horse haulage. Practically one-half of the coal output is used in the manufacture of coke, which is shipped to the West Kootenay smelters, or exported.

The Nicola valley is now entered by a branch line of the Canadian Pacific railway from Spences Bridge. It is expected that this will be open for traffic during the autumn. The transport facilities thus afforded should be an incentive to prospecting for coal in this region. Coal certainly occurs there, but nothing very definite is yet known as to the extent of the fields. The Diamond Vale Coal Company has been the most active in the work of prospecting. They have a diamond drill at work continuously on their Quilchena area.

A couple of diamond drill holes were also bored during the year in the valley between the Coldwater and the Nicola rivers.

The Pacific Coal Company, with mine at Bankhead, near Banff, Alberta, have completed and put in operation their large breaker, to prepare the anthracite coal for the market. It is of the best modern type and probably the most complete in North America. The coal is thoroughly divested of all friable parts so that it can stand long transportation without breaking up. The result of this preparation, however, is the production of a rather large proportion of anthracite dust. After a long series of careful experiments, the company is erecting a briquetting plant to use this dust. The plant, which may be in operation at the close of the year, will produce 200 tons of briquettes per day. The presses adopted are of the Zwoier pattern.

In the Edmonton district, all the coal mines have been very active, and everywhere, provision was being made for a greatly increased output. The city of Edmonton has been growing very rapidly and the market for coal has naturally grown in proportion.

The feature of the year in the district has been the inauguration of mining by shafts. Previously, all the mines were worked by tunnels driven into the banks of the Saskatchewan river, but there are now three mines that have sunk shafts from sixty to 195 feet. The individual production of the mines is so far small, the largest not exceeding 200 tons in two shifts.

Mr. Denis also made a short visit to the Pembina River coal crops some seventy miles west of Edmonton. There are in township 53, range VII, west of the 5th meridian, several seams of what appears to be high grade lignite. Two of these exceed twelve feet in thickness, and are lying almost horizontally. They are at the present moment rather far from means of transportation, but both the Canadian Northern and the Grand Trunk Pacific railways have their final location survey lines run within very easy access of this yet untouched field.

The following note gives the results obtained by Dr. Hoffmann as to the composition of these lignites:—

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'Memo. *re* three samples of lignite from Pembina river, Alberta, collected by Mr. T. Denis, August 16, 1906.

Of these samples—

No. 1 was taken across the outcrop, of the thirteen-foot seam above the burnt shale outcrop, on the east bank of Pembina river, about four hundred yards above the crossing of the river; S.E. $\frac{1}{4}$, section 33, township 53, range VII, west of the 5th initial meridian, Alberta.

No. 2 was taken across the outcrop of the thirteen-foot seam nearest to the crossing of the Pembina river, on the east bank of that stream; N.E. $\frac{1}{4}$ of section 33, township 53, range VII, west of the 5th initial meridian, Alberta.

No. 3, was taken across the outcrop of the six-foot seam, on the west bank of the Pembina river, at the crossing; N.E. $\frac{1}{4}$ of section 33, township 53, range VII, west of the 5th initial meridian, Alberta.

Analyses, by fast coking, of the foregoing, by Mr. F. G. Wait, gave as follows:—

	No. 1.	No. 2.	No. 3.
Hygroscopic water..	12·93	13·78	13·07
Volatile combustible matter .. .	31·96	32·01	32·03
Fixed carbon..	45·11	47·35	47·56
Ash..	10·00	6·86	7·34
	100·	100·	100·
Coke, per cent	55·11	54·21	54·90

They all yield by fast coking, a non-coherent coke. The ash had in each instance a light reddish brown colour.

NATURAL GAS AT MEDICINE HAT.

The Medicine Hat Natural Gas field is holding out without any sign of diminution of pressure. The municipality have two wells in commission, with depths of 1,000 and 1,100 feet respectively, and a rock pressure of 650 pounds. The Canadian Pacific railway have also a well, and natural gas is practically the only fuel burnt in their repair shops. It is used under the boilers, in the forge, for making and tempering springs, for tire setting, &c. The saving in labour and in coal effected by the introduction of this almost ideal fuel is very considerable.

PALÆONTOLOGY AND ZOOLOGY.

J. F. Whiteaves.

The fourth and concluding part of "Palæozoic Fossils, Vol. III." was published in September last. As printed, it consists of 110 pages of letter press, with eight text figures, and twenty full page plates. The explanations of the plates were written in 1906, and the recent receipt of some new material has necessitated the rewriting of a considerable portion of the letter press, in order to include the additional information that has been gleaned from it and from other sources. As now completed the whole volume consists of 352 pages large octavo, with forty-two plates, and twenty-six text figures.

A paper descriptive and illustrative of a new Canadian species of *Cyrtoceras* (*C. cuneatum*) has been published in the *Ottawa Naturalist* for October, 1906. A commencement has been made of a paper on the fossil fishes of the Devonian rocks of Chaleur bay. This paper is intended as a supplement to two papers on this subject, that were published in the Transactions of the Royal Society of Canada for 1886 and 1888.

Several collections of fossils have been examined during the year, most of which have been reported upon, either verbally or by letter. Among these are the following:—

Cambro-Silurian.—Fifty-three small pieces of highly fossiliferous argillites from the Utica or Lorraine formation at St. Bruno mountain, Chambly county, Quebec, collected by Dr. J. A. Dresser in 1905. Most of the species in these argillites have been determined, but some of them are new to science and have yet to be described. By far the most abundant fossil in them is a brachiopod that Dr. Ulrich identifies with *Dalmanella multisepta* (Meek). This is the species which is so common in the Utica formation at Ottawa, and which has previously been identified with *Orthis testudinaria*. According to Dr. Ruedemann, the most characteristic graptolite in these argillites is *Dendrograptus tenuiramosus*, Walcott.

Silurian.—A few fossils from the Guelph formation at Belwood, Ont., recently collected by Mr. Joseph Townsend.

Devonian.—Ten fossils from the Braine pass, and one fossil from Braine creek, Yukon, all collected by Mr. C. Camsell in 1905. These are clearly of Devonian age, but their precise horizon in that formation has yet to be ascertained. Small collections of fossils from the Corniferous limestone near Formosa, Gorrie and Belmore, Ontario, recently made by Mr. Townsend; and from near Waterford, in the same province, recently made by Mr. N. H. Cowdry.

Triassic.—A few fossils, that are probably of Triassic age, collected by Mr. Joseph Keele on the Rackla river, Yukon, in 1905.

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Cretaceous.—Six fossils from the Snake river, and seven from the Peel river, Yukon, collected by Mr. Camsell in 1905. Fifteen fossils from the Cretaceous rocks at Roger creek, Alberni, Vancouver island, collected by Mr. W. J. Sutton in 1905. These prove to be eleven specimens of *Anacropsis linaistriata*, three of *Cytherea subtrigona*, both of which are species characteristic of, and previously only known from, the lower shales and sandstones or subdivision C, of the Queen Charlotte islands—and a fragment of a dicotyledonous leaf. These fossils indicate the existence of a detached area of Cretaceous deposits, corresponding in age with the 'coal-bearing rocks' of the Queen Charlotte islands, at the head of the Alberni canal. Between forty and fifty fossils from the Benton, and Pierre Fox Hill, or Colorado formations, in Southern Alberta, collected by Mr. D. D. Cairnes in 1905. A few fossils from Harrison lake, B.C. sent for determination by the Rev. G. W. Taylor, of Wellington, B.C. These prove to be specimens of *Aucella crassicollis*, a species which is indicative of a very low, and apparently the lowest known, geological horizon in the British Columbia Cretaceous.

Pleistocene.—On the 5th of September last, while digging a well on his farm, in lot 21 of the 11th concession of Pakenham, Ont., Mr. Patrick Cannon discovered the skeleton of some large vertebrate animal, in a mixture of blue clay with marine shells, of Pleistocene age, fourteen feet below the surface. Only a portion of this skeleton was exhumed, which was sent to the writer for determination. It proved to consist of the skull, with most of the cervical and two of the dorsal vertebrae, of a young individual of a whale, which is clearly referable to *Delphinapterus vermontanus*. This is the *Beluga vermontana* of Thompson (which was first described as *Delphinus vermontana*), but it has long been conceded that Rafinesque's generic name *Beluga* is synonymous with *Delphinapterus*, Lacepede. Moreover, it is very doubtful whether Thompson's provisional species can be satisfactorily distinguished from the common White Whale or Beluga (*Delphinapterus leucas*) now living in the Gulf of St. Lawrence and North Atlantic. Portions of the skeleton of *D. vermontanus* had previously been found in Pleistocene clays on the Jacquet river, N.B.; at Rivière du Loup and Montreal, Que.; also at Cornwall, Ont.; as well as in Vermont; but this is the first time that remains of this cetacean have been discovered in the Post Tertiary deposits of the Ottawa valley.

In Zoology, several small collections, mostly of land and fresh-water shells, have been examined and the species determined, for Professor Macoun, Mr. Joseph Keel, and various correspondents. In some of these collections there are a few species that are either new to Canada, or that were not previously represented by Canadian specimens in the Museum of the Survey. Three papers on Canadian zoological subjects have been contributed to the '*Ottawa Naturalist*' for February, May and September, 1906.

During Mr. Low's absence from Ottawa for a little over two months last summer, the duties of Acting Deputy Head and Director were performed by the writer. In addition to letters written or dictated in that capacity, the writer's official correspondence in 1906 consisted of 156 letters received and 185 written.

The following specimens were received in 1906, either from members of the staff or from employees of the department:—

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Macoun, Professor John:

Two small collections of fresh-water shells; one from a small lake four miles and a half due west of Hamiota; and the other from a small lake in the sand hills west of Pine creek and northeast of Carberry, Manitoba.

Ells, Dr. R. W.:

Collection of fossil plants from the north side of Kennebecasis island, N.B.

Ami, Dr. H. M.:

About 200 Cambro-Silurian fossils from the 'crush and thrust' conglomerates at Quebec city; and about the same number from the Trenton formation of the Montmorency river.

Twenty-five fossils from the Lower Trenton rocks at Pine Tree island, Ottawa, and twenty-five from the Trenton formation at Governor bay, Ottawa.

150 concretions, holding remains of fishes, plants and shells, from the Pleistocene clays near Ottawa.

Lambe, L. M.:

A large collection of fish, insect and plant remains, from the Tertiary lake deposits of the Horsefly river, the vicinity of Kamloops lake, Quilchena, Coutlee and Princeton, B.C.

McInnes, William:

Thirty fossils from the Lower Palæozoic rocks at Cormorant lake, Saskatchewan river; and small collections of land and fresh water shells from six localities between the Saskatchewan and the head waters of the Little Churchill river.

Dowling, D. B.:

Twenty-four fossils from the Upper Banff limestone, and ten from rocks apparently of Triassic age, from the Brazeau river, Alberta.

Thirty-five fossils from the Fernie shale of the Red Deer and Sheep rivers, Alberta; and forty from the Cretaceous beds above the Kootanie, on the Saskatchewan and Sheep rivers, Alberta.

Wilson, W. J.:

Four species of fresh-water shells from the Harricanaw river, north of Seals Home lake, Que.

Keele, Joseph:

Specimens of three species of fresh-water shells, (viz., *Limnæ palustris*, *L. truncatula*, and *Planorbis parvus*) from small ponds in the valley of Hunker creek, Yukon.

Spreadborough, W.:

248 specimens of birds and small mammals, from the Chilliwack valley, B.C.

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O'Sullivan, Owen:

Small collection of fresh-water shells from the Nelson river, and headwaters of the Little Churchill river, Keewatin.

Two specimens of *Conchidium decussatum*, and eighteen Pleistocene fossils, from the Deer branch of the Churchill river, Keewatin.

Brock, R. W.:

About fifty fossils from a zone in the stratified rocks in the western portion of the Rossland camp; and about a dozen specimens of plant remains from Little Sheep Creek valley, at Paterson, on the International Boundary line.

Cairnes, D.D.:

About ten specimens of Carboniferous or Devonian fossils, thirty of Cretaceous invertebrata, and six of Cretaceous plant remains, from the southern portion of the Yukon.

Johnston, W. A.:

Large collection of fossils, including some fine crinoids, cystideans, and a few starfishes, from the Trenton limestone along the Trent Valley canal, near Kirkfield, Ont.

The additions to the palæontological and zoological collections in the Museum during 1906, and from other sources, are as follows:—

By presentation:—

(A.—Palæontology.)

Grant, Colonel C. C., Hamilton, Ont.:

Five small parcels of fossil bryozoa from the chert beds of the Niagara formation at Hamilton, determined by Mr. Ray S. Bassler.

Thirty-four fossils from the Silurian rocks near Hamilton, and seven from the Cambro-Silurian drift at Winona, and the lake shore at Hamilton.

Sutton, W. J., Victoria, B.C.:

Eleven specimens of *Amauropsis tenuistriata*, three of *Cytherea (Callista) subtrigona*, and fragment of a dictyledonous leaf, from the Cretaceous rocks at Roger creek, Alberni, Vancouver island.

Cowdry, N. H., Waterford, Ont.:

Two small specimens of *Cypricardinia indenta*, and tail of a trilobite, *Lichas (Conolichas) eriopis*, Hall, from the Carboniferous limestone of Ontario.

(B.—Zoology.)

Ives, C., Miscouche, P.E.I.:

Specimens of *Astyris dissimilis* and *Cingula minuta* (two small sea shells), from Miscouche.

Whiteaves, F. K., Ottawa:

Sets of eight eggs, of the Chickadee; of seven, of the Belted Kingfisher; and of six, of the Baltimore Oriole, House Sparrow, and Bank Swallow; all from near Ottawa.

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Winkler, G. E., Penticton, B.C.:

Four perfect and fresh specimens of *Gonidea angulata* (a rare fresh-water mussel or clam), from the Okanagan river at Penticton.

Fletcher, Dr. James, Ottawa:

Specimens of two small fresh-water limpets (*Ancylus caurinus* and *tardus*), from Cowichan lake, Vancouver island.

Stoker, Dr. R. N., Duncans, V.I.:

More specimens of *Ancylus* from Cowichan lake.

Wilson, Eli, Armstrong, B.C.:

Small collections of land and fresh-water shells from four localities in British Columbia.

By purchase:—

Two specimens of the Rocky Mountain goat, and two of the Canadian lynx, from Closson, Alberta.

Albino mink, female, shot in Wainfleet township, Ont., by Mr. D. Moore, January 15, 1906, and purchased from Mr. James Crysler, taxidermist, Low Banks, Ont.

Skunk, nearly albino, shot at Garnett settlement, St. John co., N.B., by Mr. J. C. Garnett, in October, 1903.

A few fossils from the Corniferous limestone at Formosa, and near Gorrie and Belmore, Ont.

Lawrence M. Lambe.

Work on the 1904 collection of vertebrates from the Oligocene deposits of the Cypress hills was continued last winter. The vertebrate fauna of the Cypress hills, as represented by the 1904 and previous collections, includes fishes, reptiles (turtles, snakes and crocodiles) and mammals. The last named class is represented by numerous species of the four orders Ungulata, Rodentia, Carnivora and Insectivora. In all, the fauna consists of between fifty and sixty species of which one-fourth are apparently new to science. In the preparation of the report on this extremely interesting fauna the manuscript is more than half completed and about half of the drawings necessary for the plates have been made.

Some attention was given to the small collection of Tertiary fishes from the Horsefly, Kamloops and Similkameen districts of British Columbia, as a result of which a paper entitled 'On *Amyzon brevipinne* Cope, from the Amyzon beds of the southern interior of British Columbia,' was read before the Royal Society of Canada at its Annual meeting in May last. This paper has since been printed and distributed (Trans. Royal Society of Canada, new series, vol. xii., p. 151, pl. 1). The above collection has been for some time in the Museum of the Survey and is referred to in the Summary Report of last year as pointing to the probable equivalency in age of the Tertiary fish-bearing beds of Horsefly, Tranquille and Tulameen rivers.

A new Testudo recognized during the study of the turtles of the Cypress hills collection (Oligocene) and further information obtained regarding the structure of

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some of the Cretaceous forms from Red Deer river, made it expedient to publish during the year the two following papers:

'Descriptions of new species of *Testudo* and *Buina*, with remarks on some Cretaceous forms,' *Ottawa Naturalist*, vol. xix., p. 187, pls. 3 and 4.

'*Boremys*, a new Chelonian genus from the Cretaceous of Alberta,' *Ottawa Naturalist*, vol. xix., p. 232.

(Summer Work).

Pursuant to the instructions received to proceed to British Columbia and there examine the Tertiary sedimentary deposits in certain districts of the southern interior of that province, viz., in the neighbourhood of Kamloops lake, to the north at Horsefly river, to the south in the Nicola district and in the vicinity of the junction of the Similkameen and Tulameen rivers, I left Ottawa in the middle of June. Two and a half months were spent in the field, the aim of the expedition being to secure a better understanding of the age of these Tertiary deposits with the acquisition by systematic search of collections of their fossils, with special reference to remains of vertebrates. Of the fish, plant and insect remains occurring in these rocks, those of fishes were considered as excellent horizon markers and a probable means to a more definite determination of the age of the Tertiary sedimentary rocks of the above-mentioned districts.

Starting in the Kamloops district some time was spent in camp at the mouth of Tranquille river on the north side of Kamloops lake. From here Red point, six miles to the west on the north shore, and the southern shore of the lake opposite the mouth of the Tranquille, were reached; at both of these places Tertiary sedimentary rocks occur.

I next proceeded to Horsefly river, by means of the stage northward from Ashcroft, to 150 Mile House, and the branch stage eastward from there via Parker's camp, to Horsefly mine, a point on Horsefly river seven miles from Quesnel lake and distant about one hundred and sixty miles by the stage route from Ashcroft.

Returning to Kamloops, the Nicola district to the south was next visited and the rocks in the neighbourhood of Quilchena and near Coutlee were closely examined. Thence I drove to Princeton (Vermilion forks of the old maps), about forty miles due south of Nicola lake, in the vicinity of which settlement numerous outcrops of Tertiary shale occur on both the north (Tulameen) and south forks of the Similkameen river.

I was ably assisted in the field by Mr. E. Wilson, of Armstrong, B.C., whose zeal and interest in the work largely contributed to the success of the expedition.

The collections of fossils obtained in the above-mentioned areas from the Tertiary lake beds are from the following localities:—

Kamloops district—

Near the mouth of Tranquille river, north shore of Kamloops lake.

Red point, north shore of Kamloops lake.

Horsefly district—

Horsefly mine, seven miles above the mouth of Horsefly river.

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Nicola district—

The Diamond Vale Company's mine, near Quilchena.

Coal Gully, near Coutlee (Coal Gully basin).

Similkameen district—

At a number of points at and above Princeton on the Tulameen and Similkameen rivers.

A number of fossil plants were received by me, whilst at Princeton, from Mr. Charles Camsell, of this Survey, who collected them from Tertiary shales at the mouth of Whipsaw creek, a tributary of the Similkameen.

The above collections comprise fish, plant and insect remains. Professor D. P. Penhallow, of McGill University, has undertaken the study of the plants with a view to reporting on them, his report to take the form of a monograph, to be issued by this Department, on the plants of the Tertiary sedimentary rocks of the southern interior of British Columbia. The plant material available for study, besides last summer's collection, includes former collections made by Dr. G. M. Dawson at a number of localities, and by Dr. R. Ells and Mr. R. A. A. Johnston, in 1904, in the Nicola valley. The insects it is proposed to submit to a competent authority. The fishes include a number of interesting forms, some of which may prove to be new to science.

From a preliminary study of these fishes it would appear that the view already expressed,* that the Tertiary shales of Horsefly, Tranquille and Similkameen rivers are probably of the same age, is substantiated. That the fish- and plant-bearing beds of the vicinity of Quilchena have a similar age appears probable, relying on the occurrence in these shales of a fish that is thought to be referable to *Amyzon brevipinne*, a species common to the Horsefly and Tulameen beds. Further study of last summer's collection, however, is necessary before a more definite opinion regarding the exact age of the Quilchena shales is expressed.

Last year a number of casts of types and original fossils, and photographs of mounted skeletons and restorations of Tertiary vertebrates were purchased from the American Museum of Natural History, New York. This year, casts and photographs of a few Mesozoic and some additional Tertiary vertebrate species, that it was thought desirable to have represented in the Survey collection, were obtained from the same institution. These latter with those previously received, form a valuable series illustrating the land and marine vertebrate life of American Mesozoic and Tertiary times.

H. M. Ami.

In addition to the preparation of reports on the occurrences of petroleum, gas, and the natural resources of Northern Alberta; and on coal occurrences along the line of the Medicine Hat and Northern Alberta railway, my time was largely occupied in determining, and arranging for the Museum, fossils from various localities, especially in Eastern Canada.

* 1906, 'Note on the Age of the Horsefly, Similkameen and Tranquille Tertiary beds of the Southern Interior of British Columbia,' Summary Report of the Geol. Survey Dept. for 1905, p. 137; and 1906, 'On *Amyzon brevipinne*, Cope from the Amyzon beds of the Southern Interior of British Columbia,' Trans. Royal Soc. of Canada, vol. xiii; second series, p. 151 pl. 1.

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The faunal lists prepared for the Director's 'Cruise of the *Neptune*' were supplemented by a further study of several species which proved to be rare or altogether new to science.

Considerable progress was made in preparing fossil lists to form appendices to reports of the Ottawa and Cornwall, Kingston, Pembroke and Haliburton sheets.

In connexion with the Chaudière Power case now before the Canadian courts a report on the geology of Phileum island, Ottawa river, and of the south side of Hull island, has been prepared and handed to the Attorney to the Crown.

Pursuant to a report made by me last year on the geology of the cliffs below the Citadel, Quebec city, an additional report was prepared this year, which included recommendations for the prevention of erosion along the face and adjoining the strata on which the terrace and fortifications are built.

Some two weeks were spent in making an examination, for the Quebec Railway Light and Power Company, of the Montmorency valley, about one mile above the falls.

For the Department of Militia and Defence a brief report was made on the geology of the vicinity of the Beaumont shore, in connexion with the excavations for the Beaumont fort.

A report was also made for the promoters of the Lake St. John Railway extension on the prospects furnished by the Chibougamau mining region.

By permission, I spent about two weeks in New York state giving geological evidence in a suit of law regarding the springs at Saratoga.

Acting on the Director's instructions I prepared a report on the rocks included in and adjacent to the golf links along the north shore of the Ottawa river and their relations to the probable sources of water supply at the links.

At the request of Dr. G. F. Kunz, of Messrs. Tiffany & Co., an examination was made of specimens of the rocks or pebbles constituting the drift of a district in Indiana where 'loose diamonds' had been found. In Ottawa, Messrs. A. E. Barlow, W. J. Wilson and Professor W. Miller, and subsequently Dr. F. Adams in Montreal, examined the specimens, which showed a striking resemblance to the rocks constituting the rock formations of western and northern Ontario.

During the year a number of fossil plants were forwarded for determination to Professor D. P. Penhallow of McGill University.

Some five hundred specimens of fossils collected by me were added to the Palaeontological section of the Museum.

On May 14 by request of the Director I took over charge of the archæological and ethnological collections of the Survey.

NATURAL HISTORY BRANCH.

Professor John Macoun.

During the last eleven months my assistant, Mr. J. M. Macoun, and I have been engaged on the ordinary routine work of this branch, except for the three months I spent in the Northwest. The large collection of plants made by me in Quebec during the season of 1905 has all been named and mounted, good progress has been made with the collection made by Mr. J. M. Macoun in British Columbia that year and all the smaller collections made by members of the Geological Survey staff and others have been determined and placed in the herbarium. The Catalogue of Mammals is approaching completion and the new edition of the Catalogue of Birds will be ready for the printer early in January.

The number of Natural History specimens sent to us for determination has greatly increased during the past year, especially in botany, and much of our time is employed in this work. During the past eleven months 4,924 sheets of botanical specimens were sent to herbariums in different parts of the world, chiefly in exchange for specimens received. Of the 3,604 specimens mounted 1,842 were from foreign countries.

Nine hundred and forty-nine official letters were written and about the same number received. This is a larger number than has been written by us during any previous year and indicates the increase in the work of this branch.

PUBLISHING DEPARTMENT.

F. J. Nicolas.

The following reports and catalogues have been published since January 1, 1906:—

No. 913. The Mineral Pigments of Canada. By C. W. Willimott (pp. 39). Published February 18, 1906.

No. 914. Supplementary List of Publications during 1904 and 1905 (pp. 11). Published February 20, 1906.

Mineral Production of Canada for 1905 (pp. 16). Published March 15, 1906.

No. 939. Preliminary Report on the Rossland, B.C., mining district. By R. W. Brock (pp. 40). Published June 2, 1906.

No. 923. Report on Chibougamau Mining Region. By A. P. Low (pp. 61).

No. 940. Report on Graham Island, B.C. By Dr. R. W. Ellis (pp. 46). Published July 20.

No. 888. The Geology and Petrography of Mount Yamaska. By G. A. Young, forming Pt. H, Annual Report, Vol. xvi. (pp. 43).

No. 955. French edition of 923 (pp. 57). Published August 2.

No. 947. Summary Report of the Acting Director, for 1905 (pp. 144). Published August 31.

No. 950. Palaeozoic Fossils. Vol. iii., Part iv. (and last). By Dr. J. F. Whiteaves (pp. 208). Published October 10.

No. 956. Catalogue of Publications (pp. 129). Sent to printer June 11. Signed for printing September 21. Published October 12.

No. 907. Annual Report (New Series), Vol. xiv. (pp. 1193), Containing the following reports:—

(A) Bell, R.—Summary Report of the Acting Director.

(B) McConnell, R. G.—Report on the Klondike.

(F) Dowling, D. B.—Report on an Exploration of Ekwan river, Sutton lakes and west coast of James bay.

(H) Barlow, A. E.—Report on the Origin, Geological Relations and Composition of the Nickel and Copper Deposits of the Sudbury Mining District, Ont.

(J) Ellis, R. W.—Report on the Geology of a Portion of Eastern Ontario.

(M) Poole, H. S.—Report on Pictou Coal-field.

(O) Adams, F. D. and LeRoy, O.—Report on the Wells of Island of Montreal.

(S) Ingall, E. D.—Report of Section of Mines, 1901.

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No. 911. Annual Report (New Series), Vol. xv. (pp. 1025). Containing the following reports:—

- (A) Bell, R.—Summary Report of the Acting Director, for 1902.
- (AA) Bell, R.—Summary Report of the Acting Director, for 1903.
- (F) Dowling, D. B.—Report on Coal-fields of Souris river.
- (S) Ingall, E. D.—Report of Section of Mines, 1902.

No. 905. 'Cruise of the Neptune,' by A. P. Low (pp. 355). Published November 19, 1906.*

No. 928. Section of Mines, Annual Report, 1904.

The following reports have been printed and are in the bindery:—

No. 902. Report on Brome mountain, Que., by J. A. Dresser.

- {No. 942. Report on the Upper Stewart river, Yukon, by J. Keele, and
- {No. 943. On the Peel and Wind rivers, Yukon, by C. Camsell.

The following reports are going through the press:—

No. 952. Annual Report (New Series), Vol. xvi. (pp. 733). Containing the following reports:—

- (A) Bell, R.—Summary Report of the Acting Director, for 1904.
- (B) Ells, R. W.—Report on Graham island, B.C.
- (C) Keele, J.—Report on Upper Stewart river.
- (CC) Camsell, C.—Report on Peel and Wind rivers.
- (G) Dresser, J. A.—Geology and Petrography of Brome mountain.
- (H) Young, G. A.—Geology and Petrography of Yamaska mountain.
- (S) Ingall, E. D.—Report of Mines Section, 1903.

No. 958. Annual Report on Chemistry and Mineralogy, by G. C. Hoffmann.

No. 949. Cascade Coal-field, by D. B. Dowling.

No. 961. Reprint of Report on Nickel and Copper Deposits of Sudbury district, Ont., by Dr. A. E. Barlow.

* Out of print.

MAPPING AND ENGRAVING.

C. O. Sénécal.

Mr. Sénécal reports as follows on the work accomplished under his supervision during the past eleven months:—

During the early part of this period, the work was carried out by a staff of seven draughtsmen and a general assistant and typewriter. At the beginning of the summer Messrs. J. A. Robert and F. O'Farrell were detached for field work, and later Mr. P. Frèreault resigned. A new draughtsman, Mr. G. Aitken, was afterwards given employment, but the staff is still numerically weak to cope with the increasing demand made on this branch. However, the progress made, it is hoped, will be found satisfactory, and thanks are due to my present assistants for their courteous and efficient services.

Fairly well equipped rooms for the preparation of blue-prints, photo-copies and reductions of maps, and for general photographic work are now placed at the disposal of this office, and although the work may, in part, be done by the draughtsmen themselves, the employment of a professional photographer is suggested.

The assignment of the work was as follows:—

Mr. L. N. Richard compiled and prepared complete copies for photo-lithographing the map of raised beaches of the Ontario Interlake peninsula; completed the compilation of the map of Moose Mountain region, Alberta; prepared the colour copy of the map of Chibougamau district, Quebec; revised the plate proofs of Pembroke, and Ottawa and Cornwall geological sheets Nos. 120 and 122 of the Ontario series, and prepared the colour work of the same.

Mr. Richard completed the plotting by latitudes and departures of the railway and road traverses he made in Nova Scotia last year, and laid them as base-lines on projected sheets Nos. 92, 93, 94, 95, 103, 104, 105, 106, 107, 108, 119, 120 and 121 of the systematic series of sheets on the scale of 4 miles to 1 inch.

Mr. O. E. Prud'homme traced and lettered the following maps, plans, &c., for engraving: Sections for Lawrencetown sheet No. 53, N.S.; Musquodoboit Harbour sheet, No. 54, N.S., and Gay River sheet, No. 55, N.S.; the geological map of Graham island (Queen Charlotte group), B.C.; plans and sections of Leipsigate and Harrigan gold districts of Nova Scotia and the geological map of the districts of Algoma and Thunder bay, Ontario. He prepared for lithographing the relief copy in crayon shading of the four sheets of the map of Cascade Coal basin, Alberta. He also prepared the black and colour copies of additions and corrections required for a second edition of the Victoria Mines and Sudbury maps.

Mr. Prud'homme spent a considerable time during last summer in rearranging and indexing original plotted sheets, manuscript maps, and reserve stock of printed maps for reference in the map room.

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Mr. P. Frèreault assisted Mr. J. Keele in the compilation of the Peace River map, and traced the same for engraving. He has drawn the following maps for photolithographic reproduction: The Windy Arm mining district, Yukon; the Graham Island coal field, British Columbia, and the southwest coast of Hudson bay. He also prepared the colour work on the index map of Nova Scotia, on the map of the country between Temagami and Rabbit lakes, Ontario, and on the Graham Island geological sheet.

Mr. Frèreault resigned on August 28.

Mr. A. Dickison compiled and traced for photo-lithographing the index map of Nova Scotia; compiled a geological map of southwest Nova Scotia on the scale of 4 miles to 1 inch, and has a tracing of the latter in progress. He compiled and traced for engraving a general index map of the Yukon; traced for engraving the maps of the Rossland mining camps and of the Upper Stewart River region, and prepared the colour copies of the Manitoulin Island sheet, No. 126, of the Ontario geological series. Mr. Dickison almost completed the compilation of the maps of the Upper Winisk River region, on the scale of 8 miles to 1 inch, and has also in hand the compilation of the geological sheets Nos. 16 and 17. Nipigon district, Ontario. Besides the above, Mr. Dickison made a large number of plans, diagrams and sketches for photo-engraving to illustrate various reports, &c.

Mr. J. A. Robert compiled and traced for engraving the map of Lake Chibougamau region, Quebec, and began the compilation of the geological sheets Nos. 84, 98, 99 and 103 of the Nova Scotia series. He was detached for field work on August 21.

Mr. F. O'Farrell assisted Mr. E. R. Faribault in the compilation of the Nova Scotia geological sheets of the vicinity of Halifax, Nos. 66 to 73. He finished the compilation of the map of Temagami and Rabbit lakes and traced the same for engraving. Mr. O'Farrell left for the field on April 21.

Mr. H. Lefebvre revised the four sheets of the map of Cascade Coal basin, Alberta, and prepared the colour work on the geological and topographical editions of the same for lithographing. Mr. Lefebvre assisted Mr. Dowling and spent the greater part of last summer in making photo-enlargements of and compiling photo-topographic surveys of the coal fields of the Rocky mountains, between Panther and Clearwater rivers, Alberta. These are well advanced and it is expected the map will be completed during the coming winter.

Mr. Lefebvre also made a large number of pantagraph reductions of railway plans for a new edition of the map of the Nottaway River basin, northwestern Quebec.

Mr. G. Aitken was appointed on the temporary staff on the 1st of August. He traced for engraving and prepared the coloured copy of a contoured map of the Moose Mountain region, Alberta, and made reductions of new surveys for the map of the basin of Nottaway river.

The routine work of laying down projections, revising and correcting map proofs, making reductions, tracing for field use, lists of instrument repairs, &c., was divided among the staff and attended to.

SESSIONAL PAPER No. 26

The map-work carried out by the several field officers is as follows:—

The coal fields of the Rocky mountains in part of Kananaskis and Elk River valleys, Alberta, on the scale of 40 chains to 1 inch, by Mr. D. B. Dowling assisted by Mr. H. Lefebvre.

The coal fields of the Rocky mountains between Panther and Clearwater rivers, Alberta, on the scale of 40 chains to 1 inch, by Mr. D. B. Dowling, assisted by Mr. G. S. Malloch.

The compilation of Mr. C. Camsell's surveys of Peel river, Yukon, and the map of Upper Stewart River region, both on the scale of 8 miles to 1 inch, and a sketch map of Tantalus and Five Finger coal fields, by Mr. J. Keele.

A sketch map of Windy Arm mining district, Yukon, by Mr. H. Maclaren.

Compilation of map of Moose Mountain region, Alberta, on the scale of 2 miles to 1 inch, and progress on compilation of a portion of the Yukon, south of Whitehorse mining district, on the scale of 1 mile to 1 inch, by Mr. D. D. Cairnes.

The Peterborough Geological Sheet, No. 117, Ontario series, on the scale of 4 miles to 1 inch, in progress by Mr. W. A. Johnston.

Messrs. W. J. Wilson and H. Collins completed their geological map of portions of the districts of Thunder Bay and Algoma, Ontario, on the scale of 8 miles to 1 inch, from a variety of surveys, including their own, carried out between 1903 and 1906.

Mr. W. H. Boyd compiled a preliminary map of the Rossland mining camps, British Columbia, and has in progress the mapping of his surveys in the same field on the scales of 400 feet to 1 inch in contours of 20 feet intervals and of 1,200 feet to 1 inch in contours of 40 feet intervals.

The serial geological sheets Nos. 66 to 73 Nova Scotia on the scale of 1 mile to 1 inch were completed by Mr. E. R. Faribault. These sheets, except for the addition of geological sections and minor details, are ready for publication and will be traced for engraving at the first opportunity.

The revision of the eastern sheet of the Dominion geological map on the same scale of 50 miles to 1 inch was attended to by Mr. J. White, geographer of the Department of the Interior, and the copy was placed in the King's Printer's hands at an early date. No proofs of the revised map have as yet been received.

The compilation of the Kingston district, Ont., covering sheets Nos. 111 and 112 on the scale of 4 miles to 1 inch is also in the hands of the geographer of the Interior.

The Manitoulin Island Geological sheet, No. 126, Ontario, held over for many years, was placed in the lithographer's hands and the edition is expected during the winter.

New editions of the following maps now out of print, are in progress viz.:—The Victoria mines, Sudbury; Copper Cliff, and Elsie and Murray mines of the Sudbury mining district; the Basin of Nottaway river, the geological map of the Bancroft district, Ontario, and the Nipissing and Timiskaming map sheets Nos. 131 and 138, Ontario and Quebec.

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Two maps of the Gorge and Falls of Niagara river, to accompany a monograph on the physics of the Falls, were also supplied by Dr. J. W. Spencer, and engraved on copper.

There are at present twenty-six maps in various stages of progress in the hands of the King's Printer. Among these are the two editions—geological and topographical—of the four-sheet map of the Cascade Coal basin, which was engraved on copper, and will be issued to the public, it is expected, early in 1907.

The examination and repairing of the field instruments was, as usual, attended to. Several worn-out instruments were replaced by new ones.

The meetings of the Geographic Board of Canada were also attended regularly.

The following is a list of the maps, plans and diagrams received from the King's Printer during the period covered by the report :—

SESSIONAL PAPER No. 26

Catalogue Number.	Description.	Area in square miles.
906	Geological map of the Northeastern part of the Dominion of Canada—Scale 50 miles to 1 inch.	
942	Yukon—Map of Peel and Wind rivers, scale 8 miles to 1 inch.	
916	Yukon—Sketch geological map of Windy Arm Mining district. Scale 2 miles to 1 inch.	
917	Yukon—General index map. Scale 32 miles to 1 inch.	
921	British Columbia—Geological map of Graham Island. Scale 4 miles to 1 inch. ...	
922	British Columbia—Geological map of Graham Island Coal field. Scale 1 mile to 1 inch.	
941	British Columbia—Preliminary Geological map of City of Rossland and vicinity. Scale 1,600 feet to 1 inch.	
915	North-West—Southwest Coast of Hudson Bay. Scale 16 miles to 1 inch.	
663	Ontario—Ignace Geological Sheet, No. 5. Scale 4 miles to 1 inch.	3,456
919	Ontario—Recession Lines of Niagara Falls. Scale 200 feet to 1 inch.	
920	Ontario—Part of the Interlake Peninsula showing Ancient Shore lines of Great Lakes.	
903	Ontario and Quebec—Ottawa and Cornwall Sheet, No. 210. Scale 4 miles to 1 inch.	3,264
887	Quebec—Geological and Topographical Map of Yamaska Mountain. Scale 20 chains to 1 inch.	About 12
901	Quebec—Geological and Petrographical Map of Brome Mountain. Scale 40 chains to 1 inch.	" 90
918	Quebec—Geological Map of Chibougamau region. Scale 4 miles to 1 inch.	
793	Nova Scotia—Tatamagouche Geological Sheet, No. 59. Scale 1 mile to 1 inch. ...	216
794	Nova Scotia—Malagash Geological Sheet, No. 60. Scale 4 miles to 1 inch.	216
795	Nova Scotia—Pugwash Geological Sheet, No. 61. Scale 1 mile to 1 inch.	216
796	Nova Scotia—Wentworth Geological Sheet, No. 62. Scale 1 mile to 1 inch.	216
836	Nova Scotia—Londonderry Geological Sheet, No. 63. Scale 1 mile to 1 inch. ...	216
837	Nova Scotia—Noel Geological Sheet, No. 64. Scale 1 mile to 1 inch.	216
878	Nova Scotia—Kennetcook Geological Sheet, No. 65. Scale 1 mile to 1 inch. ...	216
879	Nova Scotia—Walton Geological Sheet, No. 74. Scale 1 mile to 1 inch.	216
838	Nova Scotia—Five-Islands and Tennycape Geological Sheet, No. 75. Scale 1 mile to 1 inch.	216
839	Nova Scotia—Economy River Geological Sheet, No. 76. Scale 1 mile to 1 inch. ...	216
840	Nova Scotia—Southampton Geological Sheet, No. 82. Scale 1 mile to 1 inch. ...	216
841	Nova Scotia—Parrsboro Geological Sheet, No. 83. Scale 1 mile to 1 inch.	216
945	Nova Scotia—Plan and Section of Harrigan Gold District. Scale 400 feet to 1 inch.	
937	Nova Scotia—Plan and Section of Leipsigate Gold District. Scale 500 feet to 1 inch.	
	Also a series of eight diagrams showing the Mineral Production of Canada, 1905.	

LIBRARIAN'S REPORT.

Dr. John Thorburn.

During the eleven months from January 1, 1906, to November 30, there were distributed 21,730 publications of the Geological Survey, comprising reports, parts of reports, special reports and maps; of these, 18,746 were distributed in Canada; the remainder were sent to foreign countries, as exchanges to universities, scientific institutions, and to individuals engaged in scientific investigations. A much larger number of our publications has been sent out this year than in any previous year, showing that an increased interest is being taken in mineral industries relating to Canada.

The sale of publications during the year, including reports and maps, amounted to \$362.78. As mentioned in last year's report, the amount received for our publications has been gradually decreasing, as the free distribution has been on a more liberal scale than heretofore.

There were received, as exchanges or donations to the library, 2,949 publications, including reports, transactions, proceedings, memoirs, periodicals and maps. The volumes purchased during the year were 354, and seventy-three scientific periodicals were subscribed for. The number of letters received in connexion with the library was 2,845, besides 1,925 acknowledgments from exchanges and individuals. The number of letters sent from the library was 2,788, besides 644 acknowledgments for publications received.

There are now in the library about 16,200 volumes, besides a large number of pamphlets on various subjects.

The number of volumes bound during the year was 178.

My assistants engaged in library work have given faithful and efficient service during the year.

The library is open from 10 a.m. to 4 p.m. for persons wishing to obtain information in regard to scientific matters.

SESSIONAL PAPER No. 26

ACCOUNTANT AND SECRETARY'S DEPARTMENT.

John Marshall.

The staff at present employed numbers 74.

During the year the following changes have been made in the permanent staff :—

In March, 1906, Mr. A. P. Low was appointed Deputy Head and Director of the Department.

In July, Mr. C. W. Willimott was promoted from the second to the first class, and Miss Bessie Urquhart was transferred from the temporary to the permanent staff.

The funds available for the work and expenditure of the Department during the fiscal year ending June 30, 1906, were :—

Details.	Grant. Expenditure.	
	\$ cts.	\$ cts.
Civil-list appropriation.....	65,030 00	
General appropriations.....	115,293 33	
Civil-list salaries.....		62,036 78
Explorations and surveys.....		50,515 01
Boring operations.....		1,000 00
Department of Interior, zinc commission.....		7,500 00
Wages of temporary employees.....		35,943 69
Printing, engraving and lithographing.....		6,791 18
Books and instruments.....		5,780 82
Chemicals and apparatus.....		289 76
Specimens for Museum.....		3,356 08
Stationery, mapping materials, &c.....		2,349 70
Incidental and other expenses.....		2,287 06
Advances to explorers.....		29,295 75
		207,145 83
Less—Advanced in 1904-05 on account of 1905-06.....	\$40,065 96	
Deduct—Unexpended advances credited Casual Revenue...	1,296 77	
		38,769 19
		168,376 64
Unexpended balance Civil-list appropriation.....		2,993 22
Unexpended balances General appropriations.....		8,953 47
	180,323 33	180,323 33

The correspondence of the Department shows a total of 15,720 letters sent, and 17,892 received.

I have the honour to be, sir, your obedient servant,

A. P. LOW,

Deputy Head and Director.

OTTAWA, December, 1906.

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GEOLOGICAL SURVEY OF CANADA

A. P. LOW, B.Sc., DIRECTOR

SECTION OF MINES

ANNUAL REPORT ON THE MINERAL
INDUSTRIES OF CANADA

FOR

1905



OTTAWA

PRINTED BY S. E. DAWSON, PRINTER TO THE KING'S MOST
EXCELLENT MAJESTY

1907

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OTTAWA, January 10, 1907.

To A. P. Low, Esq., B. Sc.,
Director and Deputy Head,
Geological Survey Dept.

SIR,—I beg herewith to hand you the Annual Statistical Report of the Mineral Industries of Canada giving the complete and revised information regarding these industries for the year ending December 31, 1905. This has been preceded by an advance statement of the Mineral Production dated March 2, 1906, which, as usual, was only provisional and subject to alteration. Complete data relating to the mineral industries cannot be obtained until well on in the year following that dealt with so that compilation of the final report can only be commenced late in the succeeding year and its issue is thus delayed.

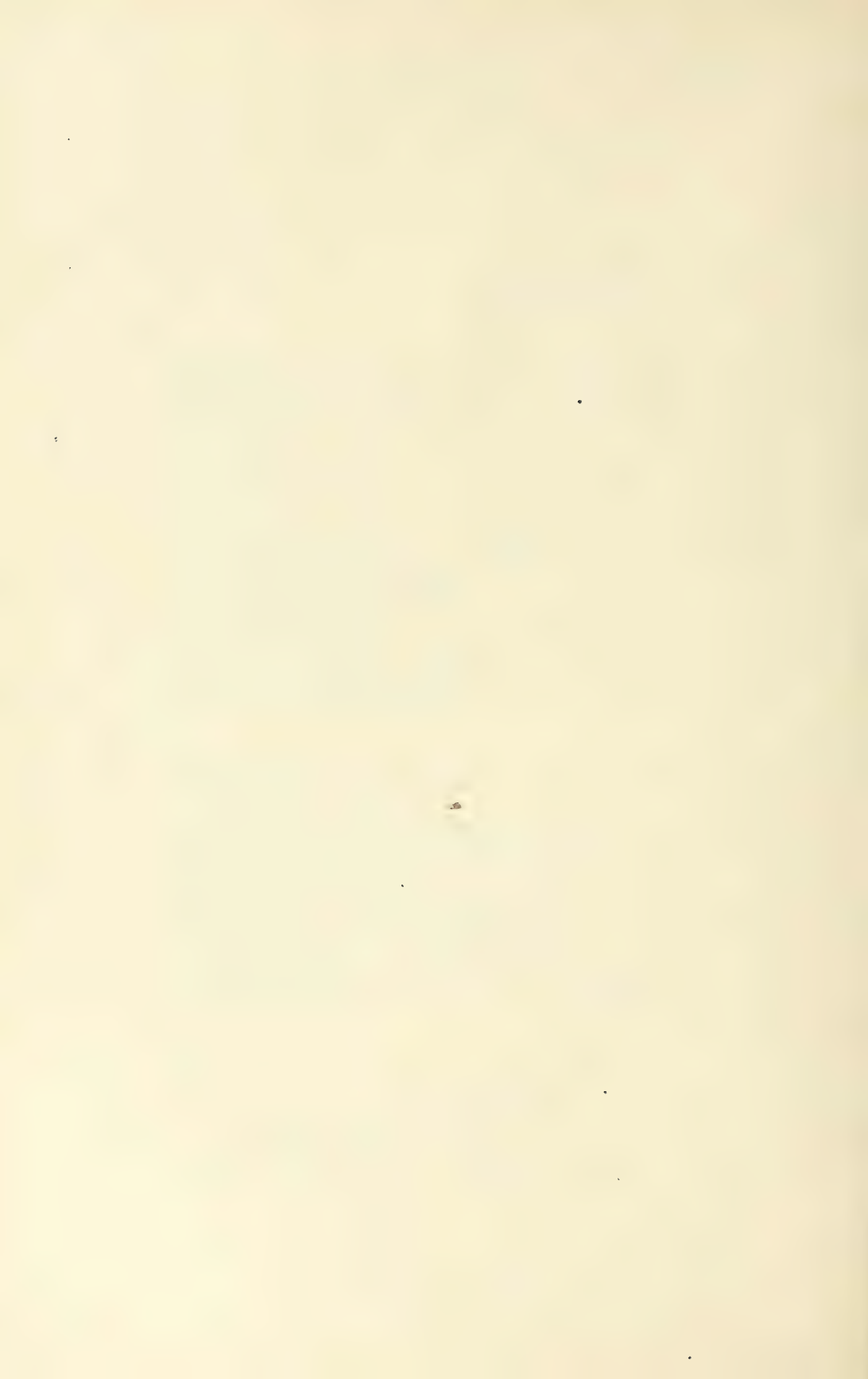
Besides the preparation of the accompanying report, the staff of the Section has, as usual, been kept busy in many other kindred directions, such as answering numerous inquiries regarding the mineral resources, the mining and metallurgical industries of the country, as well as in collecting, filing and indexing all available information regarding the same. Mining districts have been visited and studied as far as time and means permitted.

Acknowledgment is heartily accorded of the work performed by the staff of the Section in respect of all its functions. Apart from the collection and compilation of the Statistics, which is Mr. McLeish's chief charge, he has taken especial interest in the Structural Materials and has made some preliminary studies in the field in this connexion. For several years now Mr. Denis has been engaged in the field in investigation of the coal, gas and petroleum fields of Canada, and the results of his work will appear shortly in bulletin form. A similar work covering copper in Eastern Canada has been commenced by myself and will appear as a re-issue of the Bulletin on this subject already issued by the Survey.

I am Sir,

Your obedient servant,

ELFRIC DREW INGALL,
Mining Engineer to the Geological Survey.



EXPLANATORY NOTES.

YEAR AND TON USED.

The year referred to throughout this report is the calendar year, except for the figures of imports, which refer to the fiscal year ending June 30. The ton is that of 2,000 pounds, unless otherwise stated.

EXPORTS AND IMPORTS.

The figures given throughout the report referring to exports and imports are compiled from data obtained from the books of the Customs Department, and will occasionally show discrepancies, which, however, there are no means of correcting.

The exports and imports under the headings of each province do not necessarily represent the production and consumption of the province; e.g., material produced in Ontario is often shipped from Montreal and entered there for export, so falling under the heading, Quebec.

NOTE.—N.E.S. = Not elsewhere specified.

VALUES ADOPTED.

The values of the metallic minerals produced, as per returns to this Department, are calculated on the basis of their metallic contents at the average market price of the metal for the current year. Spot values have been adopted for the figures of production of the non-metallic minerals.

GENERAL NOTES.

As in the past, care is taken to avoid interference with private interests in the manner of publishing results, and all returns of production of individual mines are treated as confidential, unless otherwise arranged with those interested. The confidence of the mining community, thus gained, has resulted in an increasingly general response to our circulars, although to complete our data, personal application is still necessary in a small number of instances, and a yet more prompt response on the part of all applied to, will help still further towards an earlier publication of the material.

The figures given throughout the reports are based, as far as possible, upon returns obtained direct from the various operators, or from official data, and the totals are checked by comparison with railway shipments, exports, and all other available sources of information. It can be therefore fairly claimed that they are as accurate as it is possible to make such figures.

After investigation of the subject we have, however, found that in the nature of things, export and railway figures can only be taken as approximately correct in most instances. In the case of the export figures entries are made, as a rule, by those having no technical knowledge of mineral substances, and in the case of the railways but few of the shipments are actually weighed, so that car-load lots, for instance, may differ considerably from the theoretical load of the car.

The lists of operators given throughout the report are not put forward as complete in every case, only those known to be active being included. Producers finding their names omitted are invited to communicate with this office that they may be included in the next issue.

CORRECTIONS—ALTERATIONS.

Corrections and alterations have been made throughout this report wherever they seemed to be called for, according to more complete and reliable data, available since previous issues.

The tabulated statement given in the folded sheet at the beginning of the report represents a compilation of all the similar statements found in previous reports, re-modelled and further revised wherever possible.

INTRODUCTION.

A reference to the accompanying general table shows that the grand total of the mineral production of Canada for 1905 was valued at \$69,525,170. For 1904, as compared with 1903, there was, unfortunately, a shrinkage of about 2·7 per cent to record, so that it is gratifying to find that not only was this falling off made up but that the increase over 1904 amounts to \$9,451,273, or equivalent to nearly 16 per cent.

The uniform basis of valuation invariably adopted by this Department enables a comparison to be made, and it will be noted the present year's total is just about \$40,000,000 greater than that for 1895, or a growth of 200 per cent.

The increases and decreases in the total valuations of the important items in the general table are exhibited in the table following.

INCREASES AND DECREASES IN VALUE.

Products.	Increases.	Decreases.
	Value.	Value.
	\$	\$
Copper.....	2,191,925	.....
Gold.....	.....	1,852,122
Pig iron (from Canadian ore).....	24,252	.....
Lead.....	1,059,411	.....
Nickel.....	3,331,373	.....
Cobalt.....	63,380	.....
Silver.....	1,570,580	.....
Zinc.....	.....	.....
Asbestos and asbestic.....	276,907	.....
Coal.....	928,032	.....
Corundum.....	39,608	.....
Gypsum.....	211,694	.....
Natural gas.....	51,185	.....
Petroleum.....	.....	79,867
Pyrites.....	.....	8,547
Salt.....	.....	920
Cement, natural.....	.....	39,973
Cement, Portland.....	625,748	.....
	10,373,195	1,981,429

It will be noticed that substantial increases are shown by all the leading industries except in the case of gold in which a very considerable falling off has to be recorded. This is altogether due to the continued decrease in the production of the Yukon placers, which has been continuous now for some years. This shrinkage has been offset by increases in all the other gold mining districts of the country, amounting to over \$300,000. An interesting feature is the increase in the output of cobalt, which is a new member among the metallics, appearing for the first time only last year. The items in the above table indicate the great prosperity of the mineral industry of Canada, representing as they do nearly 88 per cent of the whole.

PROPORTIONAL INCREASES AND DECREASES OF DIFFERENT MINERAL PRODUCTS.

Products.	Quantity.		Value.	
	Increase.	Decrease.	Increase.	Decrease.
	p.c.	p.c.	p.c.	p.c.
Metallic—				
Copper.....	16.21	.....	41.28	.....
Gold.....	.....	11.25	.....	11.25
Pig iron (from Canadian ore only) ..	.....	18	2.41	.....
Pig iron (from both home and imported ores).....	73.11	.....	75.57	.....
Lead.....	51.51	.....	65.50	.....
Nickel.....	78.96	.....	78.96	.....
Silver.....	67.55	.....	76.72	.....
Cobalt.....	313.70	.....	173.07	.....
Non-metallic—				
Asbestos and asbestic.....	40.85	.....	22.57	.....
Coal.....	5.00	.....	5.59	.....
Corundum.....	65.55	.....	36.15	.....
Gypsum.....	27.80	.....	56.53	.....
Mica.....	.....	.....	10.58	.....
Natural gas.....	.....	.....	15.58	.....
Petroleum.....	25.94	.....	.....	8.53
Salt.....	.....	3.06	.....	28
Portland cement.....	47.91	.....	48.58	.....
Granite.....	.....	.....	50.86	.....

In the above table the proportional increases and decreases in the chief industries are given both for quantity and value. A study of the figures given will show to what extent the increased or decreased values given in the preceding table are due to higher or lower prices obtainable for the various products. It will be noticed that leaving gold out, the prices of copper, lead and silver were much higher than for the previous year, whilst pig iron shows a slight advance and cobalt a very marked decrease in value. The latter feature is due to the depressing effect on the market of the large supply of this metal rendered available as a result of the discoveries at Cobalt, Ontario.

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Amongst the non-metallic products the increases and decreases are fairly evenly distributed. In this class the matter is often complicated by the proportions of different grades of products contributing to the total for each industry. Thus a proportional raise in the values does not necessarily mean higher prices throughout, it may indicate a relatively larger output of the higher priced products of any given industry.

PROPORTIONATE VALUE OF DIFFERENT MINERAL PRODUCTS, 1905.

Products.	Contri- bution over 10 p.c.	Contri- bution between 10 and 1 p.c.	Contri- bution under 1 p.c.	Total.
1 Coal	25.20			
2 Gold	21.01			
3 Nickel	10.86			
4 Copper	10.78			
5 Bricks		5.66		
6 Silver		5.20		
7 Lead		3.85		
8 Cement		2.75		
9 Building stone		2.63		
10 Asbestos and Asbestic		2.16		
11 Iron and iron ore (Canadian)		1.74		
12 Petroleum		1.23		
13 Clay products (pottery, tiles, &c., except bricks)		1.08		
14 Lime		1.08		
15 Gypsum			0.84	
16 Natural gas			0.55	
17 Salt			0.46	
18 Granite			0.33	
19 Mica			0.26	
20 Corundum			0.22	
21 Sundry under 1 per cent.			1.85	
Total				100.00

In studying the mineral industry of the country as a whole it becomes interesting to realize to what extent the different branches are to be credited as contributors to the grand total. This view of the matter is set forth in the foregoing table.

It will be noticed that the most valuable of the mineral assets of the country is coal, which stands pre-eminent, and if to this be added the other fuel items, viz.: petroleum and natural gas, 27 per cent of the whole is accounted for. The rest of the non-metallic class, other than structural materials, are to be credited only with some 5 per cent. The aggregate contribution of the structural material class is nearly 14 per cent, the balance of nearly 54 per cent being contributed by the metallic class.

Thus nearly 81 per cent of the whole value of the mineral output of Canada for 1905 is due to the activities in those industries exploiting our fuels and metallic mineral deposits.

The figures given in the table illustrate the relative importance of the individual industries without further comment. It may be pointed out, however, in regard to bricks, building stone, clay products and lime that, as explained elsewhere in the report, the available figures are probably incomplete and were it possible to get fuller data these items would take a much higher proportional rank.

With regard to the iron and iron ores item it should be remarked that the figures deal only with the results of treating Canadian ore and therefore are not to be taken as illustrative of the proportional importance of the iron smelting industries of the country. The smelting industries, as distinct from mining proper, are dealt with fully in the body of the report.

PRODUCTION BY PROVINCES, 1904 AND 1905.

Province.	1904.		1905.	
	Value of Production	Per cent.	Value of Production.	Per cent.
	\$		\$	
Nova Scotia	11,212,746	18.7	11,507,047	16.55
New Brunswick	559,913	0.9	559,035	0.80
Quebec	3,688,482	6.1	4,405,975	6.33
Ontario	12,582,843	20.9	18,833,292	27.09
Manitoba, Alberta, Sask- atchewan and Yukon	12,713,613	21.2	11,841,634	17.04
British Columbia.	19,316,300	32.2	22,378,187	32.19
Total	60,073,897	100.00	69,525,170	100.00

In the above table are compared the proportional contributions for 1904 and 1905 of the several provinces of the Dominion. As the figures given are reduced to a uniform basis of valuation a comparison is rendered possible.

It will be observed that whilst the mineral industry of the eastern provinces shows a steady growth the figures for Ontario and British Columbia are considerably augmented. In the former case this results partly from the working of the rich veins of the Cobalt district, although the higher prices ruling for metals have been an important factor in both cases.

In the prairie provinces and Yukon the falling off is of course due to the shrinkage in the gold output of the Yukon placers.

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EXPORTS

MINERALS AND MINERAL PRODUCTS OF CANADA DURING CALENDAR YEAR 1905.

Products.	Value.	Products.	Value.
Aluminum	\$ 509,777	Manufactures of metals, other than iron or steel..	\$ 81,945
Antimony ore.....	27,118	Mica.....	179,049
Arsenic.....	5,400	Mineral pigments.	7,704
Asbestos.....	1,386,115	" water.....	2,137
Barytes.....	14,343	Nickel.....	1,569,693
Bricks.....	5,888	Oil, crude.....	2
Cement.....	3,143	" refined.....	2,078
Clay, manufactures of.....	35	Ores unspecified.....	687,565
Chromite.....	45,072	Platinum.....	283
Coal.....	4,029,457	Phosphate.....	1,253
Coke.....	509,908	Plumbago, crude.....	7,596
Copper.....	5,443,873	" mfrs. of.....	518
Feldspar.....	27,660	Pyrites.....	55,767
Gold.....	13,706,969	Salt.....	6,112
Grindstones.....	17,461	Sand and gravel.....	152,805
" rough.....	7,497	Silver.....	2,777,218
Gypsum, crude.....	388,474	Stone unwrought.....	13,089
" ground.....	2,673	" wrought.....	3,545
Iron and steel.....	1,287,558	Other articles.....	71,331
Iron ore.....	407,881		
Lead.....	1,046,541		
Lime.....	85,723	Total.....	34,579,886
Manganese ore.....	1,720		

EXPORTS.

DESTINATION OF PRODUCTS OF THE MINE, DURING THE FISCAL YEAR, 1904-1905.

Destination.	Value.	Destination.	Value.
United States.....	\$28,764,461	St. Pierre.....	\$26,765
Great Britain.....	991,874	Mexico.....	18,131
Belgium.....	841,121	Denmark.....	16,017
Newfoundland.....	370,968	British West Indies.....	9,895
China.....	289,540	Holland.....	7,236
Germany.....	251,155	Cuba.....	775
Bermuda.....	72,379	Australia.....	695
Hong Kong.....	66,693	New Zealand.....	559
France.....	54,853	Spain.....	347
Japan.....	40,789	Argentine.....	208
Italy.....	39,077		
Norway and Sweden.....	36,764		
British Africa.....	32,027		
			\$31,932,329

The foregoing two tables are compiled from figures to be found in the reports of the Department of Trade and Commerce illustrative of the exports of mineral substances from the country.

As might be expected the metallic ores and products form the greater bulk of the sales to other countries. Under the headings Gold, Silver, Copper, Nickel, Lead, Iron and Steel comes nearly 75 per cent of the values of all the exports and if to these be added Coal and Coke, only about 14 per cent is left for the balance of the mineral substances exported. In the order of their importance the chief items are as follows :—Gold, 39·8 per cent ; Copper, 15·72 per cent ; Coal and Coke, 11·65 ; Silver, 8·30 ; Nickel, 4·54 per cent ; Asbestus, 4·20 per cent ; Iron and Steel, 3·72 per cent and Lead, 3·03 per cent.

As might be expected when the amount of United States capital invested in mining in Canada is considered, most of Canada's mineral which is exported finds its way into the United States. The figures in the table of destinations show that over 90 per cent is there marketed. Other American countries take about 0·15 ; Asia, 1·06 and Europe 3·84 per cent. To various points in the British Empire the exports of mineral and metallic substances amount to 4·95 per cent. of the whole.

The foregoing tables are all made to cover the calendar year for comparison with the data so presented throughout the body of the report. The subjoined statement of imports is made to cover the fiscal year ending June 30, 1904. The items therein contained have been selected from the reports of the Trade and Commerce Department.

Although the selection is necessarily made in a more or less arbitrary manner many interesting points come to light. In the items running over one million it will be noted that very much the largest number, representing over 44·7 per cent of the grand total, are those including machinery, hardware and highly manufactured articles, &c., and which would come in competition with the manufacturer rather than with the miner or smelter. Semi-finished products of iron such as pig, blooms, plates, etc., together with various iron alloys used as raw material by manufacturers of more finished products amounts to nearly eleven and a half million dollars or about 13·7 per cent. The country imports nearly twenty and a-half million dollars worth of coal, of which about half is anthracite and half bituminous. The items before mentioned, although comprising but 13 entries out of the seventy-seven in the table, cover 83 per cent of the whole. The remaining sixty-four items cover a great variety of substances, many of which will doubtless be eventually replaced by home products, whilst others will continue to come in owing to the greater proximity of the foreign source of production and for other similar causes.

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IMPORTS.

MINERAL AND MINERAL PRODUCTS FOR FISCAL YEAR 1904-1905.

Products.	Value.	Products.	Value.
Alumina..	\$ 129,822	Litharge..	\$ 57,736
Alum. and aluminous cokes.	58,385	Lithographic stone..	13,683
Aluminium..	182,970	Manganese, oxide of	6,892
Antimony..	6,664	Magnesia ..	3,747
" salts	6,164	Marble and mfrs. of	145,466
Arsenic	7,661	Mercury..	48,412
Asbestos and mfrs. of	116,836	Metallic alloys—	
Asphaltum	133,615	Babbitt metal ..	33,961
Bells and gongs..	80,251	Brass and mfrs. of	1,340,349
Bismuth..	1,410	Britannia metal ..	32,979
Blast furnace slags.....	7,917	German silver.....	76,874
Borax	88,923	Type metal.....	6,136
Bricks and tiles	369,561	Mineral and bituminous	
" fire	392,195	substances, N.E.S.....	58,569
Bohrstones	2,607	Mineralogical specimens...	2,997
Cement.....	1,263,828	Mineral and metallic pig	
Chalk.....	26,172	ments, paints and colours	1,937,159
Clays	176,805	Mineral waters.....	161,790
Coal.....	20,439,723	Nickel..	19,076
" tar and pitch..	159,141	Ores of metals, N.E.S.	1,775,158
Coke	807,842	Paraffine wax	7,795
Copper and mfrs. of.	2,042,429	candles	15,293
Cryolite	11,966	Petroleum and products of.	2,151,514
Crucibles, clay or plumbago	31,353	Phosphate (fertilizer)	15,877
Chloride of lime.....	54,889	Phosphorus	1,415
Earthenware.....	1,636,214	Platinum, mfrs. of.....	61,719
Electric carbons.....	31,622	Precious stones	1,489,076
Emery	55,230	Pumice	8,447
Feldspar, quartz, flint, &c.	18,770	Salt	399,010
Fullers' earth.....	4,967	Saltpetre.....	96,304
Gold and silver and mfrs. of	502,357	Sand and gravel	92,722
Graphite and mfrs. of.....	46,434	Slate and mfrs. of.....	93,228
Gypsum, plaster of Paris, &c	47,710	Stone and mfrs. of.....	302,724
Iron and steel—		Sulphate of copper.....	94,182
Pigs, scraps, blooms, &c.	1,463,983	" iron	3,164
Rolled, bars, plates, &c.,		Sulphur	242,251
including chrome steel	9,711,620	Sulphuric acid	8,227
Ferro-silicon, ferro-man-		Tin and manufactures of.	2,791,757
ganese, &c.	246,815	Whiting	51,215
Manufactures of, machi-		Zinc and mfrs. of.....	363,404
nery, hardware, &c....	29,357,106		
Kainite	6,427	Total...	83,521,375
Lead and mfrs. of.....	261,555		
Lime.....	71,588		

PRECIOUS METALS.

Under this heading, the metals gold and silver, are considered together. The rarer metals of the platinum group are considered under their respective names as platinum and palladium in miscellaneous metals.

GOLD.

The Geological Survey Department is indebted to the various Provincial Mining Bureaus for much of the statistical information given in the following tables.

The gold output of Canada in 1905 was \$14,610,395 as compared with an output of \$16,462,517 in 1904, a total decrease of \$1,852,122 or 11.25 per cent. The gold production has steadily decreased since 1900, when a maximum output of \$27,908,153 was reached, the falling off being due in the main to the gradual lessening of the output of the Yukon placer deposits which reached their highest production in the year mentioned. The other gold producing districts of Canada all show increases in 1905.

Of the total output, 57 per cent was derived from the Yukon district, and 96 per cent from the Yukon and British Columbia combined. Nearly 64 per cent of the whole was obtained from placer and hydraulic workings, &c., and 36 per cent from lode mining.

TABLE 1.

PRECIOUS METALS.

GOLD.—ANNUAL PRODUCTION IN CANADA.

Calendar Year.	Ounces. Fine.	Value.	Calendar Year.	Ounces. Fine.	Value.
1887.....	57,465	\$ 1,187,804	1897.....	291,582	\$ 6,027,016
1888.....	53,150	1,098,610	1898.....	666,445	13,775,420
1889.....	62,658	1,295,159	1899.....	1,028,620	21,261,584
1890.....	55,625	1,149,776	1900.....	1,350,176	27,908,153
1891.....	45,022	930,614	1901.....	1,167,320	24,128,503
1892.....	43,909	907,601	1902.....	1,032,253	21,336,667
1893.....	47,247	976,603	1903.....	911,639	18,843,590
1894.....	54,605	1,128,688	1904.....	796,445	16,462,517
1895.....	100,806	2,083,674	1905.....	706,341	14,610,395
1896.....	133,274	2,754,774			

*Calculated from the value at the rate of \$20.67 per ounce.

TABLE 2.
PRECIOUS METALS.
GOLD—PRODUCTION BY PROVINCES AND DISTRICTS, CALENDAR YEAR 1905.

Provinces.	Ounces. Fine.	Value.
Nova Scotia	(<i>l</i>) 13,708	283,353
Quebec.	191	3,940
Ontario	(<i>l</i>) 4,403	91,060
North-west Territories—		
Yukon District	(<i>wt</i>) 402,864	8,327,200
Saskatchewan River	(<i>wt</i>) 121	2,500
British Columbia.	(<i>wt</i>) 287,554	5,902,402
Total.	706,841	14,610,395

(c) As follows:		
Gold from placer mining	\$	969,300
" " vein "		4,933,102
		\$5,902,402

The smelter gives only a certain percentage of the gold values, and to recover these and save the heavy freight rates now paid, have been the objects of extensive experimenting. (See further under Antimony).

Mr. Weatherbe, deputy inspector, reports in the Nova Scotia Mines Report that 'the industry generally, has fallen off to a very marked degree, and with the closing of Dolliver Mountain, Brookfield (one of the most regular and largest producers for the past twelve years) the Bluenose, Nova Scotia and Mexican, Ecum Secum, Wine Harbour, &c., and the serious falling off in the returns from Caribou, Nova Scotia gold mining operations present a gloomy aspect.'

At the instance of the Nova Scotia Mining Society the Provincial Government employed an eminent mining engineer, Mr. T. A. Rickard, of New York, to report on the gold fields. Mr. Rickard spent from August 16th to Sept. 13th, 1905, in the province and visited the following districts: "Montague, Waverly, Renfrew, Oldham, Mount Uniacke, Caribou, Salmon River, Harrigan Cove, Goldenville, Cochran Hill, Forest Hill, Middle Country Harbour, Isaac Harbour, Goldboro, Lower Seal Harbour, West Gore, Leipsigate and Brookfield." His report has not yet been published.

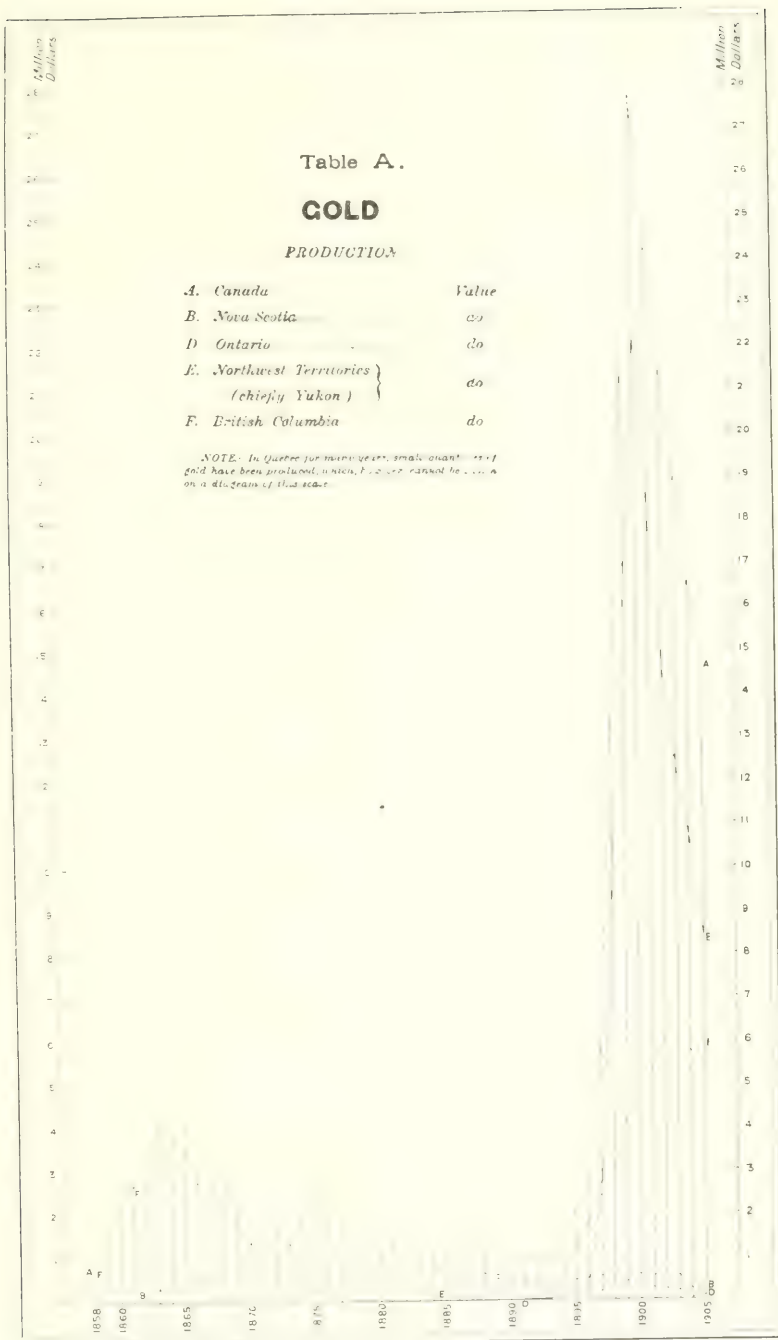
Statistics of production in Nova Scotia are given in tables 3, 4, 5 and 6 following: Table 3 shows the annual gold output. Table 4 the tons of quartz crushed and the average yield per ton. Table 5 shows the total production of each district from 1862 to the end of 1895 as well as the average yield per ton, and table 6 shows the amount of ore crushed and its yield per district for 1905.

TABLE 3.

PRECIOUS METALS.

GOLD. NOVA SCOTIA:—ANNUAL PRODUCTION.

Calendar Year.	Value.	Calendar Year.	Value.
1862.....	\$141,871	1884.....	\$313,554
1863.....	272,448	1885.....	432,971
1864.....	390,349	1886.....	455,564
1865.....	496,357	1887.....	413,631
1866.....	491,491	1888.....	436,939
1867.....	532,563	1889.....	510,029
1868.....	400,555	1890.....	474,990
1869.....	348,427	1891.....	451,503
1870.....	387,392	1892.....	389,965
1871.....	374,972	1893.....	381,095
1872.....	255,349	1894.....	389,338
1873.....	231,122	1895.....	453,119
1874.....	178,244	1896.....	493,568
1875.....	218,629	1897.....	562,165
1876.....	233,585	1898.....	538,590
1877.....	329,205	1899.....	617,604
1878.....	245,253	1900.....	598,553
1879.....	268,328	1901.....	546,963
1880.....	257,823	1902.....	627,357
1881.....	209,755	1903.....	527,806
1882.....	275,090	1904.....	214,209
1883.....	301,207	1905.....	283,353



M. 1000 Dollars

M. 1000 Dollars

Table B.

SILVER

PRODUCTION

A. Canada	Value
B. Quebec	do
C. Ontario	do
D. British Columbia	do
E. N.W. Territories (Yukon)	do

1

1

2

2

3

3

4

4

5

5

6

6

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TABLE 4.

PRECIOUS METALS.

GOLD—NOVA SCOTIA: ORE TREATED AND YIELD OF GOLD PER TON.

Calendar Year.	Tons Treated.	Yield of Gold per Ton.	Calendar Year.	Tons Treated.	Yield of Gold per Ton.
1862.....	6,473	821.91	1884.....	25,186	12.44
1863.....	17,000	16.02	1885.....	28,890	14.98
1864.....	21,431	18.21	1886.....	29,010	15.70
1865.....	24,421	20.32	1887.....	32,280	12.81
1866.....	32,157	15.28	1888.....	36,178	12.08
1867.....	31,384	16.06	1889.....	39,160	13.02
1868.....	32,259	12.41	1890.....	42,749	11.11
1869.....	35,144	19.91	1891.....	36,351	12.42
1870.....	30,824	12.56	1892.....	32,552	11.98
1871.....	30,787	12.17	1893.....	42,354	8.99
1872.....	17,089	14.94	1894.....	55,357	7.04
1873.....	17,708	13.05	1895.....	60,600	7.47
1874.....	13,844	12.87	1896.....	69,169	7.13
1875.....	14,810	14.76	1897.....	73,192	7.68
1876.....	15,490	15.08	1898.....	82,774	6.50
1877.....	17,369	18.95	1899.....	12,226	5.50
1878.....	17,989	13.63	1900.....	87,390	6.85
1879.....	15,936	16.83	1901.....	91,948	5.32
1880.....	13,997	18.42	1902.....	93,842	6.68
1881.....	16,536	12.66	1903.....	103,856	5.08
1882.....	21,081	13.04	1904.....	45,436	4.71
1883.....	25,954	811.60	1905.....	57,774	4.90

TABLE 5.

PRECIOUS METALS.

GOLD—NOVA SCOTIA:—PRODUCTION OF THE DIFFERENT DISTRICTS FROM 1862 TO 1905, INCLUSIVE.

Districts.	Tons of Ore crushed.	Total Yield.				Average Yield per ton of 2000 lbs.
		Oz.	Dwt.	Grs.	Value at \$19.00 per oz.	
Brookfield.....	98,092	43,214	2	8	821,068	8.37
Caribou.....	176,370	54,786	5	7	1,040,939	5.90
Central Rawdon..	13,340	10,121	11	21	192,310	14.42
Fifteen Mile Stream	42,483	18,800	0	5	357,200	8.41
Lake Catcha.....	18,613	15,075	11	18	286,436	15.39
Malaga.....	24,787	17,486	12	4	332,246	13.40
Montague.....	27,529	40,483	11	4	769,188	27.94
Oldham.....	52,997	56,739	8	21	1,078,050	20.34
Renfrew.....	52,452	45,439	19	13	863,360	16.46
Salmon River.....	104,136	34,100	11	21	647,911	6.32
Sherbrooke.....	318,157	159,841	6	13	3,086,985	9.55
Stormont.....	327,274	91,557	16	0	1,739,598	5.32
Tangier.....	40,677	23,124	17	6	439,373	10.80
Uniacke.....	64,495	43,765	18	3	831,552	12.89
Waverly.....	155,908	70,833	12	23	1,345,839	8.63
Wine Harbour....	69,856	39,798	7	3	756,169	10.82
Other districts.....	135,705	84,103	4	13	1,597,961	11.78
Total.....	1,722,871	849,272	17	15	16,136,185	9.37

TABLE 6.

PRECIOUS METALS.

GOLD.—NOVA SCOTIA :—DISTRICT DETAILS, CALENDAR YEAR, 1905.

Districts.	Mines Mills.		Tons Crushed.	Total Yield of Gold.			Average Yield of Gold per Ton.		
				Oz.	Dwt.	Grs.	Oz.	Dwt.	Grs.
Brookfield	2	2	10,315	3,993	6	14	..	7	18
Caribou.....	5	4	8,336	861	10	0	..	1	23
Cow Bay.....	1	1	112	127	11	11	1	2	19
Harrigan Cove.....	1	1	65	15	0	0	..	4	15
Kemptville	1	1	20	7	9	0	..	7	11
Killag.....	1	1	215	35	6	0	..	3	7
Lawrencetown.....	1	1	199	26	1	0	..	2	15
Leipsigate.....	1	1	6,235	2,210	11	0	..	7	2
Lake Catcha.....	1	1	48	35	1	0	..	14	14
Miller's Lake.....	1	1	50	59	0	0	1	3	14
Montague.....	1	1	523	124	8	8	..	4	18
Oldham	3	1	1,342	1,565	1	0	1	3	8
Renfrew	2	1	241	30	5	0	..	2	12
Sherbrooke.....	3	3	5,381	984	10	0	..	3	16
Stormont.....	6	6	21,970	3,042	7	5	..	2	18
Tangier	1	1	220	26	12	4	..	2	10
Uniacke.....	3	2	80	133	9	6	1	13	8
Vogler's Cove.....	1	1	200	43	7	19	..	4	8
Whiteburn.....	1	1	4	4	3	0	1	0	18
Wine Harbour.....	1	1	1,691	332	10	0	..	3	22
Mortared.....	..	..	..	22	19	15	..	..	..
Stibnite ore.....	..	..	527	1,232	16	23	2	6	19
Total.....	37	32	57,774	14,913	6	9	..	5	4

Quebec.—There was practically no gold derived from alluvial workings in the province of Quebec during 1905, although some prospecting work was being done in Dudswell district. The figures of production for 1905, given in table 7, represent the small quantity of gold saved from the pyritous ores mined near Sherbrooke, in the Eastern Townships.

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TABLE 7.
PRECIOUS METALS.
GOLD.—QUEBEC:—ANNUAL PRODUCTION.

Calendar Year.	Value.	Calendar Year.	Value.
1877.....	\$12,057	1892.....	\$12,987
1878.....	17,937	1893.....	15,696
1879.....	23,972	1894.....	29,196
1880.....	33,174	1895.....	1,281
1881.....	56,661	1896.....	3,000
1882.....	17,093	1897.....	900
1883.....	17,787	1898.....	6,089
1884.....	8,720	1899.....	4,916
1885.....	2,120	1900.....	Nil.
1886.....	3,981	1901.....	3,000
1887.....	1,604	1902.....	8,073
1888.....	3,740	1903.....	3,712
1889.....	1,207	1904.....	2,900
1890.....	1,350	1905.....	3,940
1891.....	1,800		

Ontario.—About \$91,000 worth of gold was mined in Ontario during 1905.

Statistics of production in previous years are given in Table 8.

TABLE 8.
PRECIOUS METALS.
GOLD.—ONTARIO:—ANNUAL PRODUCTION.

Calendar Year.	*Ounces. Fine.	Value.
1887.....	327	\$ 6,760
1888.....		
1889.....		
1890.....		
1891.....	97	2,000
1892.....	344	7,118
1893.....	708	14,637
1894.....	1,917	39,624
1895.....	3,015	62,320
1896.....	5,563	115,000
1897.....	9,158	189,294
1898.....	12,864	265,889
1899.....	20,395	421,591
1900.....	14,392	297,495
1901.....	11,845	244,837
1902.....	11,119	229,828
1903.....	9,097	188,036
1904.....	1,935	40,000
1905.....	4,403	91,000

*Calculated from the value at the rate of \$20.67 per ounce.

Alberta and Yukon District.—The placer deposits of the Saskatchewan river in the vicinity of Edmonton, produced about \$2,500 in gold during 1905.

The production of gold in the Yukon, based on sales made to the various receiving offices of the United States Mint was in 1905 \$8,327,200. This is a decrease of \$2,172,800 as compared with the production in 1904.

TABLE 9.

PRECIOUS METALS.

GOLD.—NORTH-WEST TERRITORIES :—PRODUCTION.

Calendar Year.	Yukon District.		Saskatchewan River.	
	*Ounces. Fine.	Value.	*Ounces Fine.	Value.
		\$		\$
1885 } 1886 } 1887.....	4,838	100,000	.....	.....
1888.....	3,387	79,000	102	2,100
1889.....	1,935	40,000	58	1,200
1890.....	8,466	175,000	968	20,000
1891.....	8,466	175,000	194	4,000
1892.....	1,935	40,000	266	5,500
1893.....	4,233	87,500	508	10,506
1894.....	8,515	176,000	466	9,640
1895.....	6,047	125,000	725	15,000
1896.....	12,095	250,000	2,419	50,000
1897.....	14,514	300,000	2,661	55,000
1898.....	120,948	2,500,000	2,419	50,000
1899.....	483,793	10,000,000	1,209	25,000
1900.....	774,069	16,000,000	726	15,000
1901.....	1,077,649	22,275,000	242	5,000
1902.....	870,827	18,000,000	726	15,000
1903.....	701,500	14,500,000	484	10,000
1904.....	592,646	12,250,000	48	1,000
1905.....	507,983	10,500,000	24	500
1906.....	402,864	8,327,200	121	2,500
Total.....	5,606,710	115,890,700	14,366	296,946

* Calculated from the value at the rate of \$20.67 per ounce.

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The following statement of gold production of the Yukon royalty paid, etc., is taken from the report of the Timber and Mines Branch of the Department of the Interior:—

Fiscal Year.	Total Gold Produc- tion.	Total Exemption.	Royalty Collected on.	Royalty Paid.
	\$	\$	\$	\$
1898.....	3,072,773	339,845	2,732,928	273,292
1899.....	7,582,283	1,699,657	5,882,626	588,262
1900.....	9,809,464	2,501,744	7,307,720	730,771
1901.....	9,162,082	1,927,666	7,236,522	592,660
1902.....	9,566,340	1,199,114	8,367,225	331,436
1903.....	12,113,015	.....	12,113,015	302,893
1904.....	10,790,663	.....	10,790,663	272,217
1905.....	8,222,054	.....	8,222,054	206,760

British Columbia.—The value of the output of gold in British Columbia in 1905 was, \$5,902,402 as compared with \$5,704,908 in 1904 an increase of \$197,494 or nearly 3½ per cent. Of the output of 1905 \$969,300 was derived from placer workings, dredging, hydraulic-ing, &c., and \$4,933,102 from lode ores.

The Provincial Mineralogist in his report to the Minister of Mines for the province, gives the special features of the gold production during the year as follows:

“The production of placer gold this past year is valued at \$969,300 a decrease of some \$146,000, or 13 per cent as compared with that of 1904, and is the smallest output made any year since 1901. This falling off in production is attributable to a very dry summer, preceded by a winter with little snow, with a resulting decreased supply of water for hydraulic-ing, in which class of mining the output seems to be in direct proportion to the water available for use, since the deposits of gravel seem to be fairly regular in their tenure of gold, and the output is measured by the amount of gravel washed.

“In the Atlin district, the output this past year was about \$475,000, considerably less than in 1904, but still in excess of any year previous to that.

“In this district the drought was not so severely felt, as about 40 per cent of the gold is mined by ‘individual’ methods in which a large amount of water is not necessary.

“In the Dease lake section of Cassiar, mining is carried on largely by hydraulic methods, and between the dryness of the season and the obstacles presented in getting in over a long pack trail, the season was not successful.

"The Cariboo Mining Division of the Cariboo district about held its own this past season, but the production of the Quesnel division was some 40 per cent less, owing to the very short run made by the largest producing property—The Consolidated Cariboo—due to an unprecedentedly low water supply, a trouble which the company has set about remedying by bringing in water from another watershed to supplement the present supply, at the expenditure of a large amount of money.

"In the Fraser River district, the dry season should not have had so much effect, but individual mining on the bars appears to have been replaced by dredging, and the dredges have not met the expectations of the operators, for the reason, it is claimed, that the dredges built have proved to have been of too weak construction, and were so constantly under repair as to reduce the actual working time below the margin of profit.

"Steam shovels have not yet been fully proven, and the one formerly operated in south east Kootenay, has been, at least temporarily abandoned.

"The Atlin shovel apparently worked very well, but the appliances for handling the tailings and for washing the gravel proved quite inadequate, so much so that the capacity of the shovel was never fully demonstrated. Enough was learned, however, to indicate that for our conditions in the north, the steam shovel is apt to prove much more effective than the dredge.

"The value of the output of gold from this province from lode mining for the year 1905 was \$4,933,102, an increase over the preceding year of some \$343,494 or about $7\frac{1}{2}$ per cent due entirely to the increased tonnage of gold-bearing copper ore smelted in the Boundary district.

"The greater part of the lode gold produced is found in combination with copper; in fact only 11 per cent of the total gold is produced from stamp-mills and even in these mills about half the values are obtained in concentrates, which are afterwards smelted."

Statistics of the yearly production in this province since 1858 are given in table 10, and detailed statistics of the production by districts are shown in table 11.

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TABLE 10.

PRECIOUS METALS.

GOLD:—BRITISH COLUMBIA:—ANNUAL PRODUCTION.

Calendar Year.	Value.	Calendar Year.	Value.
1858.	\$ 705,000	1882.	x 954,085
1859.	1,615,072	1883.	794,252
1860.	2,228,543	1884.	736,165
1861.	2,666,118	1885.	713,738
1862.	2,656,903	1886.	903,651
1863.	3,913,503	1887.	693,709
1864.	3,735,850	1888.	616,731
1865.	3,491,205	1889.	588,923
1866.	2,662,106	1890.	494,436
1867.	2,480,868	1891.	429,811
1868.	2,372,972	1892.	399,525
1869.	1,774,978	1893.	379,535
1870.	1,336,956	1894.	530,530
1871.	1,799,440	1895.	1,266,954
1872.	1,610,972	1896.	1,788,206
1873.	1,305,749	1897.	2,724,657
1874.	1,844,618	1898.	2,939,852
1875.	2,474,904	1899.	4,202,473
1876.	1,786,648	1900.	4,732,105
1877.	1,608,182	1901.	5,318,703
1878.	1,275,204	1902.	5,961,409
1879.	1,290,058	1903.	5,873,036
1880.	1,013,827	1904.	5,704,908
1881.	1,046,737	1905.	5,902,402

TABLE 11.

PRECIOUS METALS.

GOLD:—BRITISH COLUMBIA. PRODUCTION BY DISTRICTS—1905.

Districts.	Gold, Placer.		Gold, Lode.	
	Ounces.	Value.	Ounces.	Value.
		\$		x
Cariboo				
Cariboo Division	15,000	300,000		
Quesnel "	4,800	96,000		
Omineca "	500	10,000		
Cassiar—				
Atlin Lake Division	23,750	475,000		
All other divisions.	1,250	25,000	187	3,865
East Kootenay—				
Fort Steele Division.	708	14,160		
Other divisions.	50	1,000	14	289
West Kootenay				
Ainsworth Division			28	579
Nelson "	150	3,000	17,667	365,177
Slocan and Slocan City.			134	2,770
Trail Creek.			129,843	2,683,855
All other divisions.	280	5,600	2,707	55,954
Lillooet	1,500	30,000	125	2,584
Yale:				
Grand Forks, etc.	90	1,800	78,689	1,626,501
Similkameen.	57	1,140	19	393
Yale.	230	4,600	610	12,608
Coast and other districts.	100	2,000	8,637	178,527
Totals.	48,465	969,300	238,660	4,933,102

The following tables show the production of the Rossland mines and illustrate the average results attained during the past twelve years:—

NET PRODUCTION PER SMELTER RETURNS.

Year.	Ore, tons, 2,000 lb.	Gold, oz.	Silver, oz.	Copper, lb.	Value.
1894.....	1,856	3,723	5,357	106,229	\$ 75,510
1895.....	19,693	31,497	46,702	840,420	702,459
1896.....	38,075	55,275	89,285	1,580,635	1,243,360
1897.....	68,804	97,024	110,068	1,819,586	2,097,280
1898.....	111,282	87,343	170,804	5,232,011	2,470,811
1899.....	172,665	102,976	183,818	5,693,889	3,229,086
1900.....	217,636	111,625	167,378	2,071,865	2,739,300
1901.....	283,360	132,333	970,460	8,333,446	4,621,299
1902.....	329,534	162,146	373,101	11,667,807	4,893,395
1903.....	360,786	145,353	209,537	8,652,127	4,255,958
1904.....	312,991	133,095	181,830	7,119,876	3,760,866
1905.....	330,618	129,843	147,753	5,800,294	3,672,828

AVERAGE NET SMELTER RETURNS OR ACTUAL YIELD PER TON.

Year.	Gold.	Silver.	Copper.	Value.
	Ounces.	Ounces.	Per cent.	\$ cts.
1894.....	2.00	2.89	2.85	40.69
1895.....	1.60	2.41	2.10	35.67
1896.....	1.45	2.34	2.08	32.65
1897.....	1.42	1.60	1.32	30.48
1898.....	.78	1.54	2.35	22.10
1899.....	.596	1.07	1.65	18.70
1900.....	.513	.769	.476	12.58
1901.....	.467	3.424	1.470	16.31
1902.....	.492	1.132	1.770	14.85
1903.....	.403	.581	1.199	11.80
1904.....	.425	.581	1.137	12.61
1905.....	.393	.447	.877	11.11

SILVER.

Silver is produced in Canada in the provinces of Quebec, Ontario and British Columbia and a certain quantity is also recovered from the placer gold found in the Yukon. The total output in Canada in 1905 was 5,994,292 ounces valued at \$3,617,675 or 60.35 cents per ounce, the average value of fine silver in New York for the year. Compared with the output in 1904 an increase in quantity of 2,416,766 ounces or 67 per cent is shown and in value of \$1,570,580 or over 76 per cent. This large increase is due in a measure to the doubling of the output of argentiferous lead ore from East Kootenay, B.C., but chiefly to a large output from the recently opened up native silver deposits at Cobalt, Ontario.

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Statistics of the production of silver are shown in Table 12, while the details of provinces are given in Table 13.

TABLE 12.

PRECIOUS METALS.

SILVER.—ANNUAL PRODUCTION.

Year.	Ounces.	Value.	Average Price per ounce.	Year.	Ounce.	Value.	Average Price per ounce.
		£	Cts.			£	Cts.
1887....	355,083	347,271	98 0	1897....	5,558,446	3,323,395	59 79
1888....	437,232	410,998	94 0	1898....	4,452,333	2,593,929	58 26
1889....	383,318	358,785	93 6	1899....	3,411,644	2,032,658	59 58
1890....	400,687	419,118	104 6	1900....	4,468,225	2,740,362	61 33
1891....	414,523	409,549	98 0	1901....	5,539,192	3,265,354	58 95
1892....	310,661	272,130	86 0	1902....	4,291,317	2,238,351	52 16
1893....		330,128	77 0	1903....	3,198,581	1,709,642	53 45
1894....	847,697	534,049	63 0	1904....	3,577,526	2,047,095	57 22
1895....	1,578,275	1,030,299	65 28	1905....	5,994,292	3,617,675	60 35
1896....	3,205,343	2,149,503	67 06				

TABLE 13.

PRECIOUS METALS.

SILVER.—PRODUCTION BY PROVINCES.

CALENDAR YEAR.	ONTARIO.		QUEBEC.		BRITISH COLUMBIA.		YUKON TERRITORY.	
	Ounces.	Value.	Ounces.	Value.	Ounces.	Value.	Ounces.	Value.
	£	Cts.	£	Cts.	£	Cts.	£	Cts.
1887..	190,495	186,304	146,898	143,666	17,690	17,301		
1888..	208,064	195,580	149,388	140,425	79,780	74,993		
1889..	181,609	169,986	148,517	139,012	53,192	49,787		
1890..	158,715	166,016	171,545	179,436	70,427	73,606		
1891..	225,633	222,926	185,584	183,357	3,306	3,266		
1892..	41,581	36,425	191,910	168,113	77,160	67,592		
1893..		8,689		126,439		195,000		
1894..			101,318	63,830	746,379	470,219		
1895..			81,753	53,369	1,496,522	976,930		
1896..			70,000	46,942	3,135,343	2,102,561		
1897..	5,000	2,990	80,475	48,116	5,472,971	3,272,289		
1898..	85,000	49,521	74,932	43,655	4,292,401	2,500,753		
1899..	202,000	120,352	40,231	23,970	2,939,413	1,751,302	230,000	137,034
1900..	161,650	99,140	58,400	35,817	3,958,175	2,427,548	290,000	177,857
1901..	151,400	89,250	41,459	24,440	5,151,333	3,036,711	195,000	114,953
1902..	145,000	75,632	42,500	22,163	3,917,917	2,043,586	185,900	96,965
1903..	17,777	9,502	28,600	15,287	2,996,204	1,601,471	156,000	83,382
1904..	206,875	118,376	15,000	8,583	3,222,481	1,843,935	133,170	76,201
1905..	2,441,000	1,473,192	19,620	11,841	3,439,417	2,075,757	94,255	56,885

Since 1894, the argentiferous lead ores of British Columbia have been responsible for the greater part of the silver output in Canada,

over ninety per cent being obtained from that province. In 1905, however, the large silver production at Cobalt, Ontario, has somewhat reduced the relative importance of the western province in the total output. The proportions in this year were Ontario nearly 41 per cent, British Columbia 57 per cent.

Quebec.—The output from the Province of Quebec is represented by the small amount contained in the pyrite ore mined in the vicinity of Capelton in the Eastern Townships.

Ontario.—In this province the chief interest centres, of course, about the recent discoveries of very rich silver ores at Cobalt on the Temiscaming and Northern Ontario railway.

Descriptions of this camp are to be found in the Summary report of the Director of the Geological Survey and in a special report by Mr. W. G. Miller, the Provincial Geologist, issued by the Bureau of Mines of Ontario to which reference may be made for details.

A short visit of a few days was made by Mr. Ingall also.

The peculiar features of this camp consist in the small thickness of the veins which is, however, more than offset by their great number and wide distribution and the great richness of their contents.

In the prominence of native silver as a constituent of the ores and in their cutting a younger, flat-lying sedimentary formation over-lying Archaean rocks as well as in the presence of basic intrusives, they show some similarity to the well known silver veins of the Thunder Bay district worked for several years with startling results.

Whilst these points of similarity exist, however, there are many prominent features in which the two districts differ.

At Cobalt smaltite and niccolite are prominent whilst they were rare constituents of the Thunder bay ores in which zinc-blende and galena were most largely in evidence.

In the latter case too, an almost constant association of the rich ore bodies was the carbonaceous character of the enclosing country rocks a phenomenon not characteristic of the Cobalt camp. Then too, in the Port Arthur district the veins were much thicker and more persistent but less in number.

The similarity of the Geological formation enclosing the Cobalt veins is with the rocks exhibited in the typical Huronian district of Bruce Mines and other places along that belt rather than with the Animikie of Thunder bay.

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British Columbia.—The production by districts in British Columbia is shown in the following table.

TABLE 14.

PRECIOUS METALS.

SILVER:—BRITISH COLUMBIA. PRODUCTION BY DISTRICTS.

District.	1902.	1903.	1904.	1905.
	Ounces.	Ounces.	Ounces.	Ounces.
Cariboo	4	.....	.....	.....
Cassiar	224	53	185	477
Kootenay East—				
Fort Steele division	114,506	28,537	590,186	1,137,872
Other divisions	27,918	59,006	20,964	16,880
Kootenay West—				
Ainsworth division	320,719	108,678	90,004	99,781
Nelson	273,870	190,003	198,795	116,729
Slocan	2,223,810	1,466,931	1,540,170	1,045,948
Trail Creek	373,101	209,537	181,830	147,753
Other divisions	241,584	392,354	148,201	121,551
Lillooet .....	.....	12	.....	.....
Yale—				
Osoyoos division	219,798	320,749	245,155	630,407
Yale	542	15	625	3,863
Coast and other districts	121,841	220,329	206,366	118,156
Totals	3,917,917	2,996,204	3,222,481	3,439,417

According to the provincial mineralogist: "About 70 per cent of silver produced in the province was found associated with lead in argentiferous galena, the remainder being chiefly in conjunction with copper ores.

"The total silver production was 3,439,417 ounces, valued at \$1,971,818, the largest output the province has made since 1901 despite the fact of a decrease in the Slocan of 494,000 ounces. The increase is due primarily to the extensive working this year of the low grade argentiferous galena of the Fort Steele district, which district shows an increased production of nearly 550,000 ounces; and secondly to the increased tonnage of the large copper mines in the Boundary and the working of certain smaller but higher grade properties in that district, resulting in an increased silver production in the Boundary of about 385,000 ounces."

TABLE 15.

PRECIOUS METALS.

SILVER.—EXPORTS OF ORE.

Calendar Year.	Value.	Calendar Year.	Value.
1886.	\$ 25,957	1896.	\$ 2,271,959
1887.	206,284	1897.	3,576,391
1888.	219,008	1898.	2,902,277
1889.	212,163	1899.	1,623,905
1890.	204,142	1900.	2,341,872
1891.	225,312	1901.	2,026,727
1892.	56,688	1902.	1,820,058
1893.	213,695	1903.	1,989,474
1894.	359,731	1904.	1,904,394
1895.	994,354	1905.	2,777,218

Yukon.—As already stated the silver output credited to the Yukon represents that alloyed with the gold yielded by the placers worked in that district.

The discoveries of promising deposits of rich silver ores in the most southerly portion of the Territory on the Windy Arm of Tagish lake, seem to give promise of another fruitful source of the metal. These discoveries are described by Mr. R. G. McConnell in a bulletin recently issued by the Geological Survey.

According to his description there would seem to be a series of strong and persistent veins carrying silver in the form of sulph-antimonides and sulph-arsenides with some native silver, argentite, etc., accompanied by sulphurets of copper, iron, zinc, etc.

COPPER.

The special features of interest in the copper output of Canada in 1905 were the greatly increased production of copper from the nickel copper ores of the Sudbury district, Ontario, and the continued increase in the output of the low grade copper ores of the Boundary district, British Columbia.

The higher prices ruling for copper during the year have also stimulated the exploration and development of both new and old copper properties through the Dominion, and a continuation of these prices will no doubt tend toward a considerable increase in output in the near future.

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No far, most of the ores from which copper is obtained in Canada contain considerable values in other constituents. In Quebec the copper is derived from the pyrite deposits near Sherbrooke, which are primarily mined for the manufacture of sulphuric acid but which contain also, in addition to the copper, slight values in gold and silver. The production in Ontario is still practically represented by the copper contents of the nickel-copper ores of the Sudbury district, which contain also values in gold, silver, cobalt and the platinum group of metals. In British Columbia much the greater part of the output is now derived from the low grade sulphide ores of the Boundary district, the values of which in gold and silver would enable them to be worked at a profit, it is believed, even should the price of copper fall much below its present high level.

The total production of copper in Canada, in 1905, was 48,092,753 pounds, valued at \$7,497,660, and is the highest output yet recorded, being an increase over 1904, of 6,709,031 pounds or 16.21 per cent, and more than twice the output of any year previous to 1901. The value given is at the average price for the year of refined copper in New York.

Owing to the higher prices prevailing during 1905, the increase in total value was over 41 per cent.

The production by Provinces was as follows :—

Quebec.....	1,621,243 lbs.
Ontario.....	8,779,259 ..
British Columbia.....	37,692,251 ..
Total	48,092,753 ..

It will thus be seen that of the total output, British Columbia contributed in 1905, over 78 per cent., Ontario over 18 per cent. and Quebec a little over three per cent.

Statistics of production, exports and imports, are given in the following tables:—

TABLE 1.
COPPER.
ANNUAL PRODUCTION.*

Calendar Year.	Lbs.	Increase or Decrease.		Value.	Increase or Decrease.		Average Price per Pound.
		Lbs.	%		\$	%	
				\$			Cts
1886.....	3,505,000			385,550			11·00
1887.....	3,260,424	244,576	6·99	366,798	18,752	4·86	11·25
1888.....	5,562,864	2,302,440	70·60	927,107	560,309	152·70	16·66
1889.....	6,809,752	1,246,888	22·40	936,341	9,234	0·99	13·75
1890.....	6,013,671	796,081	11·69	947,153	10,812	1·15	15·75
1891.....	9,529,401	3,515,730	58·46	1,226,703	279,550	29·51	12·87
1892.....	7,087,275	2,442,126	25·63	818,580	408,123	53·27	11·55
1893.....	8,109,856	1,022,381	14·40	871,809	53,229	6·50	10·75
1894.....	7,708,789	401,067	4·94	736,960	134,849	15·46	9·56
1895.....	7,771,639	62,850	·81	836,228	99,268	13·47	10·76
1896.....	9,393,012	1,621,373	20·86	1,021,960	185,732	22·21	10·88
1897.....	13,300,802	3,907,790	41·60	1,501,660	479,700	46·94	11·29
1898.....	17,747,136	4,446,334	33·43	2,134,980	633,320	42·17	12·03
1899.....	15,078,475	2,668,661	15·04	2,635,319	520,339	24·37	17·61
1900.....	18,937,138	3,858,663	25·59	3,065,922	410,603	15·46	16·19
1901.....	37,827,019	18,889,881	99·75	6,096,581	3,030,659	98·84	16·117
1902.....	38,804,259	977,240	2·58	4,511,383	1,585,198	26·00	11·626
1903.....	42,684,454	3,880,195	10·00	5,649,487	1,138,104	25·23	13·235
1904.....	41,383,722	1,300,732	3·05	5,306,635	342,852	6·07	12·823
1905.....	48,092,753	6,709,031	16·21	7,497,660	2,191,025	41·29	15·590

* The production is altogether represented by the copper contained in ore, matte, &c., produced and shipped valued at the average market price for the year for fine copper in New York.

Note.—In the above table, increases are shown underlined, and decreases in the ordinary way.

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TABLE 2.

COPPER.

EXPORTS OF COPPER IN ORE, MATTE, ETC.

Calendar Year.	Pounds.	Value.
		£
1885.....		262,600
1886.....		249,259
1887.....		137,966
1888.....		257,260
1889.....		168,457
1890.....		398,497
1891.....		348,164
1892.....		277,632
1893.....	4,792,201	269,160
1894.....	1,625,389	91,917
1895.....	3,742,352	236,965
1896.....	5,462,052	281,070
1897.....	14,022,610	850,336
1898.....	11,572,381	840,243
1899.....	11,371,766	1,199,908
1900.....	23,631,523	1,741,885
1901.....	32,488,872	3,404,908
1902.....	26,094,498	2,476,516
1903.....	38,364,676	3,873,827
1904.....	38,553,282	4,216,214
1905.....	40,740,861	5,443,873

TABLE 3.

COPPER.

IMPORTS OF PIGS, OLD, SCRAP, ETC.

Fiscal Year.	Lbs.	Value.	Fiscal Year.	Lbs.	Value.
		£			£
1880.....	31,900	2,130	1893.....	168,300	16,331
1881.....	9,800	1,157	1894.....	101,200	7,397
1882.....	20,200	1,984	1895.....	72,062	6,770
1883.....	124,500	20,273	1896.....	86,905	9,226
1884.....	46,200	3,180	1897.....	49,000	5,449
1885.....	28,600	2,016	1898.....	1,050,000	80,000
1886.....	82,000	6,969	1899.....	1,655,000	246,740
1887.....	40,100	2,567	1900.....	1,144,000	180,990
1888.....	32,300	2,322	1901.....	951,500	152,274
1889.....	32,300	3,288	1902.....	1,767,200	225,832
1890.....	112,200	11,521	1903.....	2,038,400	252,594
1891.....	107,800	10,452	1904.....	2,115,300	270,315
1892.....	343,600	14,894			
1905 (Copper, old and scrap or in blocks.....			Duty free	222,000	25,371
(Copper in pigs or ingots.....			"	1,722,400	241,177
Total, 1905.....				1,944,400	266,548

TABLE 4.

COPPER.

IMPORTS OF MANUFACTURES.

Fiscal Year.		Value.	
		s	
1880		123,061	
1881		159,163	
1882		220,235	
1883		247,141	
1884		134,534	
1885		181,469	
1886		219,420	
1887		325,365	
1888		303,459	
1889		402,216	
1890		472,668	
1891		563,522	
1892		422,870	
1893		458,715	
1894		175,404	
1895		251,615	
1896		285,220	
1897		264,587	
1898		786,529	
1899		551,586	
1900		1,090,280	
1901		951,045	
1902		1,281,522	
1903		1,291,635	
1904		1,191,610	

		Duty.	Pounds.	s
		Free.		
1905.	Copper in bolts, bars and rods, in coils, or otherwise in lengths not less than 6 feet, unmanufactured.....		8,634,900	1,231,729
	Copper, in strips, sheets or plates, not planished or coated, &c	"	2,054,600	347,877
	Copper tubing in lengths not less than 6 feet, and not polished, bent or otherwise manufactured	"	326,154	77,587
	Copper rollers, for use in calico printing, imported by calico printers for use in their own factories.. ..	"		9,762
	Copper and manufactures of:—			
	Nails, tacks, rivets and burrs or washers..	30 p. c.		3,043
	Wire, plain, tinned or plated.....	15 "	176,744	24,766
	Wire cloth, &c.....	25 "		1,870
	All other manufactures of, N.O.P.....	30 "		79,247
	Total			1,775,881

Million Pounds

Table C.

COPPER

PRODUCTION

A. Total Canada	Pounds
A.S. Ditto	Value
B. Quebec	Pounds
C. Ontario	"
D. British Columbia	"

Million
Dollars

45 —

40 —

35 —

30 —

25 —

20 —

15 —

10 —

5 —

0 —

1

2

3

4

5

6

7

8

9

10

11

12

1870

1890

1910

1920

1930

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Quebec.—As usual, the copper production in Quebec was derived chiefly from the pyrites ores of the Eastern Townships, which are mined primarily for the manufacture of sulphuric acid.

The Ascot mine on the west half of lot 8. Con. VIII of Ascot was worked for a short time, producing a small quantity of good grade ore which was treated at Capelton.

Statistics of production are given in table 5 below.

TABLE 5,

COPPER.

QUEBEC :—PRODUCTION.

Calendar Year.	Pounds.	Value.
		\$
1886.....	3,340,000	367,400
1887.....	2,937,900	330,514
1888.....	5,562,864	927,107
1889.....	5,315,000	730,813
1890.....	4,710,606	741,920
1891.....	5,401,704	695,469
1892.....	4,883,480	564,042
1893.....	4,468,352	480,348
1894.....	2,176,430	208,067
1895.....	2,242,462	241,288
1896.....	2,497,200	261,903
1897.....	2,474,970	279,424
1898.....	2,100,235	252,658
1899.....	1,632,560	287,494
1900.....	2,220,000	359,418
1901.....	1,527,442	246,178
1902.....	1,640,000	190,666
1903.....	1,152,000	152,467
1904.....	760,000	97,445
1905.....	1,621,243	252,752

Ontario—Statistics of the production of copper in Ontario since 1886 are shown in Table 6. This has nearly all been derived from the nickel-copper ores of Sudbury. The total quantity of nickel copper ore mined during the year was 277,766 tons, while 251,421 tons were smelted, producing 17,388 tons of high grade matte. The quantity of matte shipped during the year was 17,405 tons while 2,675 tons remained in stock at the close of the year. The copper contents of the matte shipped, including a small output of copper from a couple of mines in process of development was 8,779,259 pounds valued at \$1,386,686.

Two copper properties were being developed at Massey station during the year, but these have not yet become serious factors so far as output is concerned.

TABLE 6.

COPPER.

ONTARIO:—PRODUCTION.

Calendar Year.	Pounds.	Value.
		\$
1886.....	165,000	18,150
1887.....	322,524	36,284
1888.....	Nil.	Nil.
1889.....	1,466,752	201,678
1890.....	1,303,065	205,233
1891.....	4,127,697	531,234
1892.....	2,203,795	254,538
1893.....	3,641,504	391,461
1894.....	5,207,679	497,854
1895.....	4,576,337	492,414
1896.....	3,167,256	344,598
1897.....	5,500,652	621,023
1898.....	8,375,223	1,007,539
1899.....	5,723,324	1,007,877
1900.....	6,740,058	1,091,215
1901.....	8,695,831	1,401,507
1902.....	7,408,202	1,861,278
1903.....	7,172,533	949,285
1904.....	4,913,594	630,070
1905.....	8,779,259	1,368,686

British Columbia—As compared with the previous year, the copper production in British Columbia shows an increase in 1905 of over 5 per cent., the total output being 37,692,251 pounds. Of this amount, over 73 per cent was derived from the Boundary district, chiefly from the Granby mines, at Phoenix, the B.C. Copper Company (Mother Lode) at Deadwood and the Dominion Copper Company (Brooklyn, Stemwinder and Rawhide) at Phoenix; 15 per cent. was obtained from the Rossland Camp, the principal mines contributing being Le Roi, Centre Star, War Eagle, Le Roi No. 2, and Jumbo. Nine per cent.

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was obtained from the Coast districts, chiefly contributed by the Tyeo and Marble Bay Mines.

Statistics of production are shown in tables 7 and 8.

TABLE 7.

COPPER.

BRITISH COLUMBIA—PRODUCTION.

Calendar Year.	Copper contained in ores, matte, &c.	Increase.		Value.
		Lb.	Lb.	
1894	324,680			\$ 31,039
1895.	952,840	628,160	193	102,526
1896.	3,818,556	2,865,716	301	415,459
1897.	5,325,180	1,506,624	39	601,213
1898.	7,271,678	1,946,498	36	874,783
1899.	7,722,591	450,913	6	1,359,948
1900.	9,977,080	2,254,489	29	1,615,289
1901.	27,603,746	17,626,666	177	4,448,896
1902.	29,636,057	2,032,311	7	3,445,488
1903.	34,359,921	4,723,864	16	4,547,735
1904.	35,710,128	1,350,207	3.7	4,579,110
1905.	37,692,251	1,982,123	5.6	5,876,222

IRON.

Iron Ore.—The production of iron ore in Canada in 1905 is estimated at about 291,097 tons as compared with 219,046 tons in the previous year, an increase of 72,051 tons, or over 32 per cent.

Although there are numerous iron prospects and properties of possible great potential value in Canada, the actual output of ore is obtained from a very few mines.

In Nova Scotia the only iron mining done was by the Londonderry Iron and Mining Company, at their mines near Londonderry, Colchester county, and Torbrook, Annapolis county. The total output was 84,952 tons and was all utilized at the Company's blast furnaces at Londonderry.

In Quebec the bog ores of Champlain, Joliette, Drummond, and Nicolet counties, were as usual mined and used in the furnaces at Radnor Forges and Drummondville, the output of these ores for the year being 12,681 tons.

In Ontario comparatively small shipments were made from the Radnor mine, Eganville, Renfrew county, the greater part of the output coming from the Helen mine at Michipicoten. The total output was 193,464 tons. The output of the Radnor mine was used in the furnaces at Radnor Forges, Que., while of the output of the Helen mine, a little over 60 per cent. was exported to lower Lake Erie ports, the balance going chiefly to Hamilton, Ont.

No production was recorded for British Columbia.

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TABLE 1.

IRON.

PRODUCTION OF ORE BY PROVINCES.

Calendar Year.	Nova Scotia.	Quebec.	Ontario.	British Columbia.	Total.
	Tons.	Tons.	Tons.	Tons.	Tons.
1886.....	44,388	.....	16,032	3,941	64,361
1887.....	43,532	13,401	16,598	2,796	76,330
1888.....	42,611	10,710	16,894	8,372	78,587
1889.....	54,161	14,533	.....	15,487	84,181
1890.....	49,206	22,305	.....	.....	76,511
1891.....	53,649	14,380	.....	950	68,979
1892.....	78,258	22,690	.....	2,300	103,248
1893.....	102,201	22,076	.....	1,325	125,602
1894.....	89,379	19,492	.....	1,120	109,991
1895.....	83,792	17,783	.....	1,222	102,797
1896.....	58,810	17,630	15,270	196	91,906
1897.....	23,400	22,436	2,770	2,099	50,705
1898.....	19,079	17,873	21,111	280	58,343
1899.....	28,000	19,420	25,126	2,071	74,617
1900.....	18,940	19,000	82,950	1,110	122,000
1901.....	18,619	15,489	272,538	7,000	313,646
1902.....	16,172	18,524	359,288	10,019	404,003
1903.....	40,335	12,035	209,634	2,290	264,294
1904.....	61,293	16,152	141,601	.....	219,046
1905.....	84,952	12,681	193,464	.....	291,097

TABLE 2.

IRON.

NOVA SCOTIA:—ANNUAL PRODUCTION OF ORE.

(Previous to 1886).

Calendar Year.	Tons.	Calendar Year.	Tons.
1876.....	15,274	1881.....	39,843
1877.....	16,879	1882.....	42,135
1878.....	36,600	1883.....	52,410
1879.....	29,889	1884.....	54,885
1880.....	51,193	1885.....	48,129

The exports of iron ore from Canada, as compiled from Custom-Reports, are shown in tables 3 and 4 for the calendar and fiscal years respectively. Nearly all the iron ore exported goes to the United States. Table 4a, which has therefore been added to show the quantity of iron ores imported into the United States from Canada, has been compiled from 'The Foreign Commerce and Navigation of the United States' published at Washington.

A comparison of table 4 and 4a, shows large discrepancies for the years 1901 to 1905, inclusive. The Canadian figures of exports for these years are evidently much too high, and an investigation has shown that an error had crept into the Customs returns, owing to a duplication of certain entries.

TABLE 3.

IRON.

EXPORTS OF IRON ORE.

Calendar Year.	Tons.	Value.	Calendar Year.	Tons.	Value.
		\$			
1893.....	2,419	7,590	1900.....	5,527	13,511
1894.....		21,294	1901*.....	306,199	762,283
1895.....	1,571	3,909	1902*.....	428,901	1,065,019
1896.....	1,033	1,911	1903*.....	368,233	922,571
1897.....	403	811	1904*.....	168,828	401,738
1898.....	182	278	1905*.....	168,289	407,881
1899.....	4,145	9,538			

*The export figures for these years are incorrect owing to a duplication of entries in Customs returns.

TABLE 4.

IRON.

EXPORTS OF IRON ORE.

Fiscal Year ending June 30	Tons.	Value.	Fiscal Year.	Tons.	Value.
		\$			\$
1879.....	3,562	7,530	1893.....	7,811	26,114
1880.....	30,524	76,474	1894.....	1,859	9,026
1881.....	44,677	114,850	1895.....	2,315	5,743
1882.....	43,835	135,463	1896.....	14	35
1883.....	44,914	138,775	1897.....	1,320	2,492
1884.....	25,308	66,549	1898.....	260	402
1885.....	54,367	132,074	1899.....	1,849	4,968
1886.....	7,542	23,039	1900.....	4,327	7,689
1887.....	23,345	71,934	1901*.....	58,401	150,657
1888.....	13,544	39,945	1902*.....	525,983	1,303,901
1889.....	24,752	60,289	1903*.....	293,510	733,230
1890.....	13,811	31,376	1904*.....	233,850	579,883
1891.....	14,648	32,582	1905*.....	224,908	540,909
1892.....	7,707	36,935			

*See foot note to table 3.

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TABLE III.

IRON.

IMPORTS OF IRON ORE INTO THE UNITED STATES FROM CANADA.*

Year ending June 30.	Tons.	Year ending June 30.	Tons.
1893.....	6,880	1900.....	3,997
1894.....	269	1901.....	30,762
1895.....	2,394	1902.....	276,363
1896.....	35	1903.....	129,219
1897.....	2,263	1904.....	113,388
1898.....	1,172	1905.....	107,358
1899.....	2,308		

* Compiled from the "Foreign Commerce and Navigation of the United States."

Pig iron.—A very substantial growth has been made in the pig iron industry in Canada in recent years, though unfortunately a very large proportion of the iron ore used has been imported. The total quantity of the pig iron made in Canada in 1905, from both Canadian and imported ores was 525,306 tons, valued at the furnaces at \$6,475,186 or an average of \$12.33 per ton. The output in 1904 was 303,454 tons valued at \$3,687,985, or an average of \$12.15 per ton, so that an increase is shown in 1905 of 221,852 tons or over 73 per cent. Five years ago the production was about 100,000 tons, while ten years ago it was less than 50,000. Statistics of the production of pig iron, together with the iron ore, fuel and flux used, are given in table 5 for the years 1887 to 1905, inclusive. Previous to 1896 the pig iron manufactured was entirely from Canadian ore. Since that date, however, increasing quantities of imported ore have been used, which will be found separately stated in the table.

It is a matter of regret that an industry of such increasing importance, and to which so much assistance has been given, should be dependent, to such an extent, on imported raw material. A total of 978,821 tons of iron were charged to Canadian blast furnaces in 1905, and of this amount 861,847 tons, or 88 per cent, were imported chiefly from Newfoundland and the south shore of Lake Superior. The Canadian ore charged in 1905 amounted to only 116,974 tons compared with 180,932 tons in 1904, and 156,613 tons in 1901, while as long ago as 1893, 124,053 tons of Canadian ore were used and 60,432 tons in 1887. Considerable attention, however, is being paid at present to Canadian iron ore deposits, and it is quite possible that in the near future an increasing proportion of these ores will be used.

TABLE 5.
IRON.
Pig Iron Production : Consumption of Ore, Fuel, &c.

CALENDAR YEAR.	IRON ORE CONSUMED.			FUEL CONSUMED.			FLUX CONSUMED.			PIG IRON MADE.		
				Charcoal.	Coke.		Coal.					
	Tons.	Value.	Bushels.	Value.	Tons.	Value.	Tons.	Value.	Tons.	Value.	Tons.	Value per ton.
1887.....	60,434	\$ 130,808	940,400	\$ 18,593	30,248	\$ 89,123	3,333	\$ 5,877	17,171	\$ 17,500	21,827	\$366.192
1888.....	54,956	102,343	804,286	41,800	28,631	82,986	2,197	4,709	16,857	16,533	21,799	313.235
1889.....	63,670	126,064	755,800	41,568	33,289	91,791	3,044	6,525	22,122	21,999	25,921	493.872
1890.....	57,304	117,880	589,800	29,193	32,832	97,639	1,241	2,638	18,478	18,361	21,772	331.688
1891.....	60,935	130,935	441,812	22,091	30,626	98,102	2,170	2,868	11,377	11,546	23,891	368.901
1892.....	96,948	250,966	1,121,365	78,291	50,882	152,311	1,740	1,797	21,687	21,687	42,443	635.421
1893.....	124,053	296,979	1,302,790	90,978	58,711	163,849	6,621	13,539	27,519	27,519	55,947	790.283
1894.....	108,871	223,861	1,173,970	53,958	52,373	142,303	7,633	14,571	34,347	34,347	49,967	646.447
1895.....	33,208	218,336	789,561	31,582	48,540	139,475	3,089	5,306	31,585	29,922	42,454	586.736
1896.....	(a) 96,560	200,887	756,600	32,256	(a) 48,660	106,353	1,407	2,288	37,462	36,140	67,268	924.129
1897.....	(a) 46,300	100,295	1,031,800	43,230	(a) 35,800	71,600	.....	.....	31,273	30,258	58,007	738.701
1898.....	(a) 53,658	131,705	1,031,800	43,230	(b) 27,810	94,533	.....	.....	33,913	31,153	77,015	912.395
1899.....	(a) 57,881	151,760	836,400	41,820	(a) 31,952	63,901	.....	.....	51,826	44,286	102,940	1,377.306
1900.....	(b) 77,107	213,165	.....	87,858	(a) 44,844	134,532	.....	.....	52,966	39,332	96,575	1,501.098
1901.....	(a) 66,384	216,322	1,928,025	87,858	(b) 64,648	193,914	.....	.....	.....	.....	.....	.....
1902.....	(a) 120,650	402,800	.....	82,408	(a) 45,021	180,084	.....	.....	.....	.....	.....	.....
1903.....	(a) 71,341	184,191	1,799,737	100,978	(a) 59,345	255,892	.....	.....	.....	.....	.....	.....
1904.....	(b) 113,042	351,382	.....	183,162	(a) 205,796	539,328	2,039	6,117	169,399	183,162	274,376	3,512.923
1905.....	(a) 136,613	544,144	.....	118,275	(b) 112,314	494,433	1,615	5,006	293,594	219,295	337,902	4,243.541
1906.....	(b) 151,010	846,338	.....	126,623	(a) 300,593	898,518	.....	.....	.....	.....	.....	.....
1907.....	(a) 125,664	429,753	.....	152,717	(b) 112,314	494,433	.....	.....	.....	.....	.....	.....
1908.....	(b) 539,381	964,979	.....	152,717	(a) 350,190	819,016	.....	.....	.....	.....	.....	.....
1909.....	(a) 82,035	247,229	.....	191,404	(b) 96,540	336,091	.....	.....	.....	.....	.....	.....
1910.....	(b) 487,911	823,117	.....	191,404	(a) 257,132	729,585	.....	.....	.....	.....	.....	.....
1911.....	(a) 180,932	489,687	.....	222,156	(b) 130,240	531,445	.....	.....	.....	.....	.....	.....
1912.....	(b) 154,671	922,394	.....	.....	(a) 365,897	962,518	.....	.....	.....	.....	.....	.....
1913.....	(a) 116,974	351,965			(b) 243,882	1,233,515						
1914.....	(b) 861,847	1,802,539										

(a) Canadian. (b) Imported.

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In the tabulated statement showing the mineral production of Canada, the production from Canadian ore only is given. This has been arrived at by separating the total production at each furnace into two classes, viz.: pig iron from Canadian ore and pig iron from imported ore, the separation being made on the basis of the Canadian and imported ore entering into the production of pig iron at each respective furnace.

The production for the past ten years separated in this way has been as follows:—

Calendar Year.	Pig iron from Canadian ore.	Pig iron from Imported ore.
	Tons.	Tons.
1896.....	40,720	26,548
1897.....	26,200	31,807
1898.....	30,553	46,462
1899.....	34,244	68,699
1900.....	35,387	61,188
1901.....	83,100	191,276
1902.....	71,664	286,238
1903.....	42,052	255,833
1904.....	68,297	235,157
1905.....	68,170	457,136

During the year there were thirteen furnaces in blast for varying periods, operated by the following companies:—

Dominion Iron and Steel Company, Sydney, C.B.—Four completed furnaces of which three were operated during the year.

Nova Scotia Steel and Coal Company, New Glasgow, N.S.—One furnace at Sydney Mines, C.B.

Londonderry Iron and Mining Company, Ltd., Londonderry, N.S.—Furnace plant at Londonderry.

Canada Iron Furnace Co. Ltd., Montreal, Que.—Furnace plants at Radnor Forges, Que., and Midland, Ont.

John McDougall and Co., Montreal, Que.—Two small furnaces at Drummondville, Que.

Deseronto Iron Co., Ltd., Deseronto, Ont.—Furnace plant at Deseronto.

Hamilton Steel and Iron Co., Ltd.—Furnace near Hamilton, Ont.

The Algoma Steel Co., Ltd., (Lake Superior Corporation).—Two furnaces at Steelton, Ont., near Sault Ste. Marie.

Of fourteen completed furnaces on December 31st, 1905, nine were in blast and five were idle. The total capacity of the fourteen furnaces if in continuous operation, would be over 800,000 tons per annum.

The statistics of the production of pig iron and steel and of rolled iron and steel in Canada as well as in the United States, are admirably presented in the Annual Statistical Report of the American Iron and Steel Association, and the following information concerning the production of steel and rolled iron and steel in Canada, is taken from the above mentioned report for 1905 :—

‘The production of all kinds of steel ingots and castings in Canada in 1905, was much the largest in the history of the Dominion, and exceeded by 221,412 tons that of 1902, the year of next largest production, when 182,037 tons were made. As compared with 1904, the increase amounted to 254,665 tons, or over 171 per cent. Bessemer and open hearth steel ingots and castings were made in both 1904 and 1905, the production of Bessemer steel amounting to 164,488 tons in 1905, against 42,738 tons in 1904, and open hearth steel to 238,681 tons in 1905, against 106,046 tons in 1904. Almost all the open hearth steel reported in 1904 and 1905, was made by the basic process. The Bessemer steel was all made by the acid process. A few hundred tons of steel castings were made in 1905 by minor processes. All the steel castings made in 1905 by various processes amounted to 9,394 tons against 6,505 tons in 1904. Canada does not make crucible steel ingots or castings.

The following table gives the production of all kinds of steel ingots and castings in Canada from 1894 to 1905, in gross tons.

Years.	Gross Tons.
1894	25,685
1895	17,000
1896	16,000
1897	18,400
1898	21,540
1899	22,000
1900	23,577
1901	26,084
1902	182,037
1903	181,514
1904	148,784
1905	403,449

Production of Rolled Iron and Steel in Canada.

The production of finished rolled iron and steel in Canada in 1905 was also much larger than in any previous year and amounted to 385,826 tons, as compared with 180,038 tons in 1904, the year of next largest production, an increase of 205,788 tons, or over 114 per cent.

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The following tables gives the production of all kinds of finished rolled iron and steel in Canada from 1895 to 1905, in gross tons. Rolled forging blooms and forging billets are included for 1905.

Years.	Gross Tons.
1895.....	66,402
1896.....	75,043
1897.....	77,021
1898.....	90,303
1899.....	110,642
1900.....	100,690
1901.....	112,007
1902.....	161,485
1903.....	129,516
1904.....	180,038
1905.....	385,826

The production of Bessemer steel rails in 1905, amounted to 133,690 gross tons, as compared with 35,155 tons in 1904; open-hearth steel rails 45,195 tons, against 1,061 tons in 1904; structural shapes 885 tons, against 447 tons in 1904; nail and spike plate 4,110 tons, against 5,030 tons in 1904; plates and sheets 4,944 tons, against 3,102 tons in 1904; all other finished rolled products, excluding muck and scrap bars, blooms, billets, sheet bars, and other unfinished forms, but including for 1905, 1,120 tons of forging blooms for billets 197,002 tons, against 135,243 tons in 1904; total 385,826 tons, against 180,038 tons in 1904. Of the 385,826 tons of finished iron and steel reported for 1905, about 318,405 tons were rolled from steel and 67,421 tons from iron, as compared with about 126,850 tons rolled from steel and about 53,188 tons rolled from iron in 1904.

In 1905 the rolling mills and steel works in Canada which operated cut nail or wire nail factories, produced 366,800 kegs of cut nails and wire nails of 100 pounds each, as compared with 324,000 kegs in 1904.

On December 31, 1905, there were 21 completed rolling mills and steel works in Canada. In addition 1 plant was being built and two plants were projected. Of the completed plants, 3 were equipped for the manufacture of steel castings only, one for the manufacture of open hearth steel ingots only, 5 for the manufacture of Bessemer or open hearth steel ingots and rolled products and 12 for the manufacture of rolled products only. The building plant was being equipped for the manufacture of black plates and tinplates and tern plates.

Of the 21 completed rolling mills and steel works in Canada on December 31, 1905, 4 were located in Nova Scotia, 5 in Quebec, 10 in Ontario, 1 in New Brunswick and 1 in Manitoba. The building plant and the two projected plants, are also in Ontario.

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Bounties.—Bounties on iron and steel, made in Canada, were provided for by the Dominion government in 1897 (chapter 6, Statutes of Canada, 1897). This Act was amended in 1899 (chapter 8, Statutes of Canada, 1899), and again in 1903 (chapter 68, Statutes of Canada 1903).

The Act of 1903 also provides for the gradual extinguishment of the bounties authorized in 1897 as follows:—

Period.	On steel ingots, puddled iron bars, and pig iron from Cana- dian ore.	On pig iron from foreign ore.
	Per ton.	Per ton.
From July 1, 1903 to June 30, 1904.....	\$ 2 70	\$ 1 80
" 1904 to June 30, 1905.....	2 25	1 50
" 1905 to June 30, 1906.....	1 65	1 10
" 1906 to June 30, 1907.....	1 05	0 70

The payments by the Dominion government on account of iron and steel bounties during the fiscal year ending June 30, 1905, were as follows, the figures having been compiled from the Auditor General's Reports for 1905.

BOUNTIES PAID ON PIG IRON MANUFACTURED IN CANADA, FISCAL YEAR, 1904-5.

Company.	On Pig Iron from Canadian Ore.		On Pig Iron from Imported Ore.		Total Bounties.
	Tons.	Bounties.	Tons.	Bounties.	
		\$ cts.		\$ cts.	\$ cts.
Algoma Steel Co., Ltd.	165 66	372 80	70,434 95	105,652 36	106,025 16
Canada Iron Furnace Co., Ltd. —					
Midland, Ont.	1,506 29	3,389 15	34,666 18	51,999 27	55,388 42
Radnor Forges, Que.	5,145 96	11,578 44	2,236 25	3,354 41	14,932 85
Deseronto Iron Co., Ltd. ...	571 00	1,284 75	10,371 00	15,556 50	16,841 25
Dominion Iron and Steel Co., Ltd.	216 45	487 01	131,878 81	197,818 22	198,305 23
Electric Reduction Co., Buckingham, Que.	176 51	397 15	.....	.....	397 15
Hamilton Steel and Iron Co., Ltd.	29,319 31	65,968 43	32,627 07	48,940 60	114,909 03
John McDougall & Co.	2,485 53	5,592 44	.....	.....	5,592 44
Londonderry Iron & Mining Co., Ltd.	19,864 77	44,695 72	.....	.....	44,695 72
Nova Scotia Steel and Coal Co., Ltd.			45,053 15	67,579 73	67,579 73
	59,451 48	133,765 89	327,267 41	490,901 09	624,666 98

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BOUNTY ON STEEL INGOTS AND PUDDLED IRON BARS, FISCAL YEAR, 1904-5.

Company.	Tons.	Bounty.
		\$ cts.
Algoma Steel Company, steel ingots	132,858·34	298,931 25
Dominion Iron and Steel Company, steel ingots	113,893·32	256,259 98
" " " steel ingots made during year 1903-4	825·71	2,229 42
Hamilton Steel and Iron Co., Ltd., steel ingots	26,981·90	60,709 26
" " " puddled iron bars	3,508·81	7,894 83
Nova Scotia Steel and Coal Co., Ltd., steel ingots	25,861·56	58,188 52
	303,929·64	684,213 26

BOUNTIES PAID ON ARTICLES MANUFACTURED FROM STEEL, FISCAL YEAR, 1904-5.

Company.	Tons.	Bounty.
		\$ cts.
Dominion Iron and Steel Co., Ltd., Sydney, C.B.— Rolled round steel wire rods at \$6	36,680·93	220,085 62
Hamilton Iron and Steel Co., Ltd.— Rolled angle bars at \$3	1,493·48	4,480 44
Montreal Rolling Mills Co.— Rolled round wire rods at \$6	213·35	1,280 10
Nova Scotia Steel and Coal Co., Ltd.— Rolled angles at \$3	1,740·92	5,222 77
Rolled plates, at \$3	84·77	254 31
		231,323 24

The total amount of bounties on iron and steel, paid by the Dominion Government during the fiscal year, ending June 30th, 1905, was therefore as follows :

Bounties on pig iron	\$ 624,666 98
" " on steel ingots and puddled iron bars	684,213 26
" " on articles manufactured from steel	231,323 24
	1,540,203 48

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Total bounties paid to each company—Fiscal year ending June 30th, 1905.

Algoma Steel Co., Ltd	\$ 404,956 41
Canada Iron Furnace Co., Ltd	70,321 27
Deseronto Iron Co., Ltd	16,841 25
Dominion Iron and Steel Co., Ltd	676,880 25
Electric Reduction Co., Ltd	397 15
Hamilton Steel & Iron Co., Ltd	187,993 56
John McDougall & Co	5,592 44
Londonderry Iron & Mining Co., Ltd	44,695 72
Montreal Rolling Mills Co.	1,280 10
Nova Scotia Steel & Coal Co., Ltd	131,245 33
Total	\$1,540,203 48

Table 6, illustrates the extent of the foreign trade of the country in regard to iron and steel products and machinery &c., made therefrom.

TABLE 6.

IRON.

EXPORTS OF IRON AND STEEL GOODS, THE PRODUCT OF CANADA.

Calendar Year 1905.		Quantity.	Value.
			\$
Stoves	No.	986	11,637
Castings, N.E.S.	\$		64,970
Pig iron	Tons.	866	22,284
Machinery, N.E.S.	\$		393,170
Sewing machines	No.	977	21,972
Typewriters	"	4,100	138,941
Scrap iron and steel	Cwt.	482,179	240,105
Hardware	\$		170,262
Steel and manufactures of	\$		224,217
Total			1,287,558

The Canadian consumption of iron and steel products, is illustrated in the following tables, Nos. 7, 8, 9, 10a, 10b and 11. The first three of these deal with the cruder forms of the metal the next two, with the manufactured articles wholly or largely composed of iron and steel, while the last table summarizes all the preceeding ones. They all cover the fiscal year ending June 30, 1905.

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TABLE 7.

IRON.

IMPORTS OF IRON, PIG, SCRAP, &c.

Fiscal Year.	Pig Iron.		Charcoal Pig Iron.		Old and Scrap Iron.		Wrought Scrap and Scrap Steel.	
	Tons.	Value.	Tons.	Value.	Tons.	Value.	Tons.	Value.
		\$		\$		\$		\$
1880	(a) 23,159	371,956			928	14,042		
1881	(a) 43,630	715,997			584	8,807		
1882	56,594	811,221	6,837	211,791	1,327	20,406		
1883	75,295	1,085,755	2,198	58,994	709	7,776		
1884	49,291	653,708	2,893	66,602	3,136	44,223		
1885	42,279	545,426	1,119	27,333	3,552	46,275		
1886	42,463	528,483	3,185	60,086	10,151	158,100		
1887	46,295	554,388	3,919	77,420	17,612	220,167	(b) 79	1,086
	Pig Iron, &c. (c)							
	Tons.	Value.						
		\$						
1888	48,973	648,012					23,293	297,496
1889	72,115	864,752					26,794	335,090
1890	87,613	1,148,078					47,846	678,574
1891	81,317	1,085,929					43,967	652,842
1892	68,918	886,485					32,627	433,695
	Pig Iron.		Charcoal Pig Iron.		Cast Scrap Iron.			
	Tons.	Value.	Tons.	Value.	Tons.	Value.		
		\$		\$		\$		
1883	56,849	682,209	5,944	84,358	729	9,317	45,459	574,809
1894	42,376	483,787	2,906	34,968	78	771	30,850	369,682
1895	31,637	341,259	2,780	31,171	643	4,347	23,390	244,388
1896	36,131	394,591	917	11,726	93	741	13,607	157,996
1897	25,766	291,788	2,936	35,373	238	1,362	7,903	95,541
1898	37,186	382,103	2,250	23,533	1,559	13,251	(e) 48,903	534,577
1899	44,261	452,911	1,955	19,123	2,378	22,594	(e) 28,352	301,268
1900	49,767	811,490	1,816	38,736	13,747	150,681	(e) 38,753	638,505
1901	35,293	548,033	490	7,121	4,499	51,032	(e) 24,773	242,189
1902	39,978	585,077	38	726	3,048	38,958	(e) 36,150	520,909
1903	91,730	1,338,574	(f) 882	16,352	7,137	94,028	(e) 43,115	670,402
1904	62,515	894,728			11,385	49,923	(e) 21,027	298,806
1905	(d) 71,005	857,879			(f) 6,533	75,521	(e) 15,479	210,900

(a) Comprises pig-iron of all kinds.

(b) From May 13 only.

(c) These figures appear in Customs reports under heading 'Iron in pigs, Iron kentledge and cast scrap-iron.'

(d) Duty \$2.50 per ton.

(e) Scrap iron and scrap steel, old, and fit only to be remanufactured, being part of, or recovered from, any vessel wrecked in waters subject to the jurisdiction of Canada. Duty free.

(f) Iron or steel scrap, wrought, being waste or refuse, including punchings, cuttings and clippings of iron or steel plates or sheets, having been in actual use, crop ends of tin plate bars, blooms and rails, the same not having been in actual use. Duty \$1 per ton.

(f) Duty \$2.50 per ton.

TABLE 8.

IRON.

IMPORTS OF FERRO-MANGANESE, &C.

Fiscal Year.	Tons.	Value.
*1887	123	\$ 1,435
*1888	1,883	29,812
*1889	5,868	72,108
*1890	696	18,895
*1891	2,707	40,711
*1892	1,311	23,930
*1893	529	15,858
*1894	284	9,885
†1895	164	5,408
†1896	652	12,811
†1897	426	9,233
†1898	1,418	22,516
†1899	1,160	22,539
†1900	1,149	39,064
†1901	1,512	38,954
†1902	6,513	150,977
†1903	6,350	162,710
†1904	2,975	75,554
†1905.....(Duty, 5 p.c.)	12,935	246,815

*These amounts include :—Ferro-manganese, ferro-silicon, spiegel, steel bloom ends, and crop ends of steel rails, for the manufacture of iron or steel.

†Ferro-silicon, spiegeleisen and ferro-manganese.

TABLE 9.

IRON.

IMPORTS : IRON IN SLABS, BLOOMS, LOOPS AND PUDDLED BARS, &C.

Fiscal Year.	Cwt.	Value.	Fiscal Year.	Cwt.	Value.
1880	195,572	\$244,601	1892	64,397	\$ 56,186
1881	111,666	111,374	1893	65,269	58,533
1882	203,888	222,056	1894	50,891	45,018
1883	258,639	269,818	1895	78,639	67,321
1884	252,310	264,045	1896	128,535	110,757
1885	312,329	287,734	1897	56,560	48,954
1886	273,316	248,461	1898	162,891	122,426
1887	522,853	421,598	1899	124,311	103,198
1888	110,279	93,377	1900	255,145	362,463
1889	80,383	67,181	1901	234,925	206,975
1890	15,041	45,923	1902	401,306	419,543
1891	41,567	38,931	1903	394,418	380,034
			1904	200,295	216,571
			1905*	317,829	319,665

*Iron or steel ingots, cogged ingots, blooms, slabs, billets, puddled bars, and loops or other forms, N.O.P., less finished than iron or steel bars, but more advanced than pig-iron, except castings. Duty \$2 per ton.

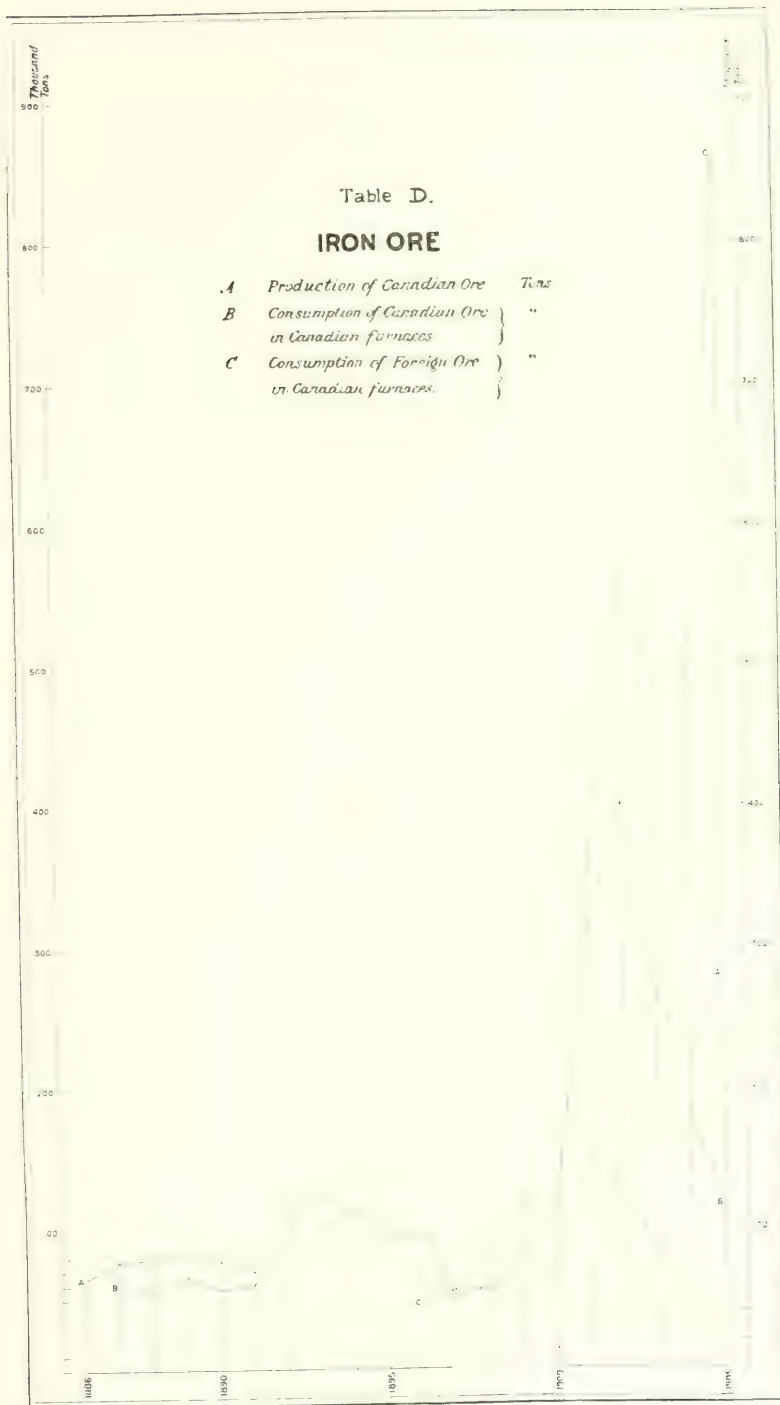
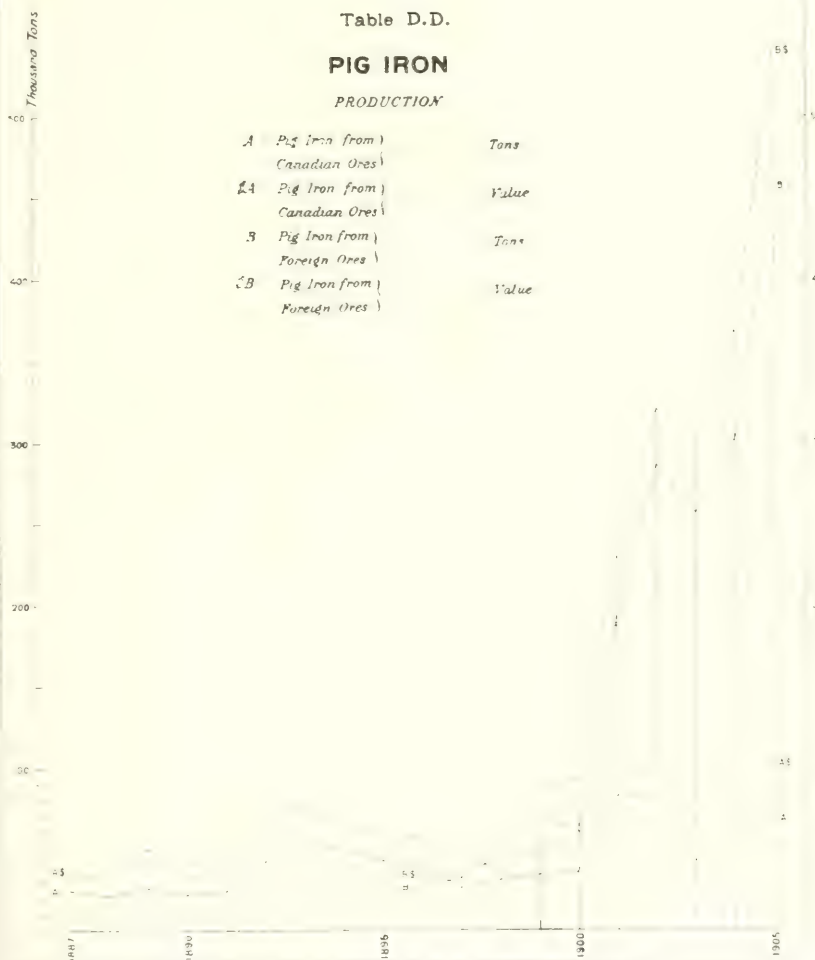


Table D.D.

PIG IRON

PRODUCTION

A	Pig iron from Canadian Ores	Tons
B	Pig iron from Canadian Ores	Value
C	Pig iron from Foreign Ores	Tons
D	Pig iron from Foreign Ores	Value



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TABLE 10a.

IRON.

IMPORTS OF IRON AND STEEL GOODS.—1904-1905.

Fiscal Year, 1905.	Duty.	Quantity.	Value.
Bar iron or steel rolled, whether in coils, bundles, rods or bars, comprising rounds, ovals, squares and flats and rolled shapes, N.O.P.	Cwt. 87 per ton.	587,140	875,067
Castings, iron or steel, in the rough, N.E.S.	\$ 25 %		291,214
Canada plates, Russia iron, flat galvanized iron or steel sheets, terne plates and rolled sheets of iron or steel coated with zinc, spelter or other metal, of all widths or thicknesses, N.O.P.	Cwt.	5 "	322,187
Iron or steel bridges or parts thereof, iron or steel structural work, columns, shapes or sections drilled, punched, or in any further stage of manufacture than as rolled or cast, N.E.S.	" 55 "	275,022	719,234
Malleable iron castings and iron or steel castings, N.E.S.	" 25 "	4,461	15,170
Mould boards, or shares or plough plates and sides and other plates for agricultural implements, cut to shape from rolled plates of steel but not moulded, punched, or otherwise manufactured.	" 5 "	60,911	175,155
Iron or steel railway bars or rails of any form, punched or not punched, N.E.S., for railways, which term for the purposes of this item shall include all kinds of railways, street railways and tramways, even although the same are used for private purposes only, and even although they are not used or intended to be used in connection with the business of common carrying of goods or passengers.	Tons. 30 "	17,904	421,084
Railway fish-plates and tie plates.	" 88 per ton.	5,396	176,002
Rolled iron or steel angles, tees, beams, channels, joists, girders, zees, stars or rolled shapes, or trough, bridge, building, or structural rolled sections, or shapes not punched, drilled or further manufactured than rolled, N.E.S., and flat-eye-barblanks not punched or drilled.	Cwt. 10 %	997,880	1,380,841
Rolled iron or steel hoop, band, scroll or strip, 8 inches or less in width, No. 18 gauge and thicker, N.E.S.	" 87 per ton.	63,922	98,889
Rolled iron or steel hoop, band, scroll or strip, thinner than No. 18 gauge, N.E.S.	" 5 "	39,265	81,645
Rolled iron or steel angles, tees, beams, channels, girders and other rolled shapes or sections, weighing less than 35 lbs. per lineal yard, not punched, drilled or further manufactured than rolled, N.O.P.	" 87 per ton.	282,339	385,997
Rolled iron or steel plates or sheets, sheared or unsheared, and skelp iron or steel, sheared or rolled in grooves, N.E.S.	" 87 "	185,467	287,239
Rolled iron or steel plates, not less than 30 inches in width and not less than $\frac{1}{4}$ inch in thickness, N.O.P.	" 10 "	416,246	640,776
Carried forward.			6,232,949

TABLE 10a—Continued.

IRON.

IMPORTS OF IRON AND STEEL GOODS.

Fiscal Year, 1905.	Duty.	Quantity.	Value.
			\$
Brought forward.....			6,232,949
Rolled iron or steel sheets No. 17 gauge and thinner, N.O.P..... Cwt.	5 p. c.	300,518	641,276
Rolls of chilled iron or steel..... "	30 "	5,459	17,619
Skelp iron or steel, sheared or rolled in grooves, imported by manufacturers of wrought iron or steel pipe for use only in the manufacture of wrought iron or steel pipe in their own factories..... "	5 "	659,801	864,631
Swedish rolled iron and Swedish rolled steel nail rods under half an inch in diameter for the manufacture of horse-shoe nails.. "	15 "	9,576	18,172
Switches, frogs, crossings and intersections for railways..... "	30 "	12,488	41,833
Steel—chrome steel..... "	15 "	2,770	13,543
Steel plate, universal mill or rolled edge bridge plates imported by manufacturers of bridges..... "	10 "	263,836	407,380
Steel in bars, bands, hoops, scroll or strips, sheets or plates, of any size, thickness or width when of greater value than 2½c. per lb., N.O.P..... "	5 "	132,227	684,725
Iron or steel beams, sheets, plates, angles, knees and cable chains for wooden, iron, steel, or composite ships or vessels..... "	Free.	60,484	102,728
Locomotive and car wheel tires of steel, in the rough..... "	"	63,780	128,639
Steel for saws and straw cutters cut to shape, but not further manufactured..... "	"	12,974	120,034
Crucible sheet steel, 11 to 16 gauge, 2½ to 18 inches wide, imported by manufacturers of mower and reaper knives for manufacture of such knives in their own factories..... "	"	5,851	29,958
Steel of No. 20 gauge and thinner, but not thinner than No. 30 gauge, for the manufacture of corset steels, clock springs and shoe shanks imported by the manufacturers of such articles for the exclusive use in the manufacture thereof in their own factories..... "	"	1,020	3,869
Steel valued at 2½ cents per lb. and upward, imported by the manufacturers of skates, for use exclusively in the manufacture thereof in their own factories..... "	"	2,365	9,335
Steel, under ½-inch in diameter, or under ½ inch square, imported by the manufacturers of cutlery, or of knobs, or of locks, for use exclusively in the manufacture of such articles in their own factories..... "	"	2,717	7,246
Carried forward.....			9,323,937

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TABLE 10a—*Concluded.*

IRON.

IMPORTS OF IRON AND STEEL GOODS.

Fiscal Year, 1905.	Duty.	Quantity.	Value.
Brought forward.....			9,323,937
Steel, No. 12 gauge and thinner, but not thinner than No. 30 gauge, for the manufacture of buckle clasps, bed fasts, furniture casters and ice creepers, imported by the manufacturers of such articles, for use exclusively in the manufacture thereof in their own factories.	Cwt.	Free.	2,825
Steel of No. 24 and 17 gauge, in sheets sixty-three inches long, and from 18 inches to 32 inches wide, imported by the manufacturers of tubular bow sockets for use in the manufacture of such articles in their own factories.....	"	"	2,110
Steel for the manufacture of bicycle chains, imported by the manufacturers of bicycle chain for use in the manufacture thereof in their own factories.....	"	"	526
Steel for the manufacture of files, augers auger bits, hammers, axes, hatchets, scythes, reaping hooks, hoes, hand rakes, hay or straw knives, windmills and agricultural or harvesting forks imported by the manufacturers of such or any of such articles for use exclusively in the manufacture thereof in their own factories ...	"	"	90,319
Steel springs for the manufacture of surgical trusses imported by the manufacturers for use exclusively in the manufacture thereof in their own factories.....	lbs.	"	1,710
Flat spring steel, steel billets and steel axle bars, imported by manufacturers of carriage springs and carriage axles for use exclusively in the manufacture of springs and axles for carriages or vehicles other than railway or tramway, in their own factories ..	cwt.	"	86,590
Spiral spring steel for spiral springs for railways, imported by the manufacturers of railway springs for use exclusively in the manufacture of railway spiral springs in their own factories	"	"	44,489
Steel for the manufacture of cutlery when imported by manufacturers of cutlery to be used in their own factories in the manufacture of such article, O.C.....	"	"	678
Total			9,711,620

TABLE 10*b*.

IRON.

IMPORTS OF IRON AND STEEL GOODS.

Fiscal Year, 1905.		Duty.	Quantity.	Value.
				\$
Agricultural implements, N.E.S., viz:				
Cultivators and weeders	No.	20 %	2,532	15,142
Drills, grain seeders, ...	"	20 "	3,446	121,777
Farm, road or field rollers.	"	25 "	24	481
Forks, pronged.	"	25 "	8,354	5,527
Harrows	"	20 "	2,603	44,874
Harvesters, self binding	"	20 "	3,594	357,550
Hay loaders.	"	25 "	492	15,094
Hay tedders.	"	25 "	922	35,176
Hoes.	"	25 "	3,115	808
Horse rakes.	"	20 "	1,890	35,161
Knives, hay or straw.	"	25 "	396	269
Lawn mowers.	"	35 "	4,558	17,325
Manure spreaders.	"	20 "	37	2,183
Mowing machines.	"	20 "	2,212	71,375
Ploughs.	"	20 "	10,384	258,829
Post hole diggers	"	25 "	1,228	1,120
Potato diggers.	"	25 "	154	4,719
Rakes, N.E.S.	"	25 "	5,369	1,034
Reapers.	"	20 "	402	18,113
Scythes	Doz.	25 "	4,288	21,377
Sickles or reaping hooks.	"	25 "	648	422
Spades and shovels and spade and shovel blanks, and iron or steel cut to shape for the same.	"	35 "	11,107	38,718
Parts of agricultural implements paying 20 p.c.	\$	20 "		490,876
All other agricultural implements, N.E.S.	"	25 "		35,351
Anvils and vises.	"	30 "		47,056
Cart or wagon skeins or boxes.	Lbs.	30 "	123,246	5,558
Springs, axles, axle bars, N. E. S., and axle blanks and parts thereof of iron or steel, for railway or tramway or other vehicles	Cwt.	35 "	21,966	63,080
Butts and hinges, N.E.S.	\$	30 "		60,369
Cast iron pipe of every description.	Cwt.	\$8 per ton	260,894	393,684
Chains, coil chains, chain links and chain shackles of iron or steel 5-16 of an inch in diameter and over.	"	5 "	48,255	148,285
Chain, malleable sprocket or link belt- ing, for binders.	\$	20 "		26,229
Chains, N.E.S.	"	30 "		83,155
Tacks, shoe.	Lbs.	35 "	28,777	2,531
Cut tacks, brad sprigs, or shoe nails, double pointed, and other tacks of iron and steel, N.O.P.	"	35 "	64,055	4,478
Engines, locomotives for railways, N.E.S.	No.	35 "	113	674,084
Fire engines.	"	35 "	11	8,958
Fire extinguishing machines.	"	35 "		46,805
Gasoline engines.	"	25 "	929	194,074
Steam engines and boilers.	"	25 "	1,107	437,432
Fittings, iron or steel, for iron and steel pipe	Lbs.	30 "	6,743,138	366,060
Carried forward				4,155,149

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TABLE 10*b*--Continued.

IRON.

IMPORTS OF IRON AND STEEL GOODS.

Fiscal Year, 1905.	Duty.	Quantity.	Value.
			\$
Brought forward			4,155,149
Forgings of iron or steel, of whatever shape or size, or in whatever stage of manufacture, N.E.S., and steel shafting, turned, compressed or polished, and hammered iron or steel bars or shapes, N.O.P.	Lbs.	30 "	3,857,689
Hardware, viz:			
Builders', cabinet-makers', upholsterers', harness-makers', saddlers' and carriage hardware, including currycombs and horse boots, N.E.S.	\$	30 "	658,338
Horse, mule and ox shoes	"	30 "	11,616
Locks of all kinds	"	30 "	217,614
Machines and machinery, &c.:			
Automobiles	No.	25 "	390
Fanning mills	"	25 "	177
Grain crushers	"	25 "	11
Windmills	"	25 "	696
Ore crushers and rock crushers, stamp mills, cornish and belted rolls, rock drills, air compressors, cranes, derricks and percussion coal cutters	\$	25 "	135,076
Portable machines:			
Fodder or feed cutters	No.	25 "	32
Horse powers	"	25 "	44
Portable engines	"	25 "	396
Portable saw mills and planing mills	"	25 "	41
Threshers and separators	"	25 "	568
All other portable machines	"	25 "	744
Parts of portable machines	\$	25 "	165,771
Sewing machines and parts of	No.	30 "	11,330
Slot machines	"	25 "	1,583
Machines, type-writing	"	25 "	3,338
All other machinery composed wholly or in part of iron or steel, N.O.P.	\$	25 "	4,467,397
Nails and spikes, composition and sheathing nails	Lbs.	15 "	17,813
Nails and spikes, wrought and pressed, trunk, clout, coopers, cigar box, Hungarian horseshoe and other nails, N.E.S.	"	30 "	334,846
Nails and spikes, cut, and railway spikes ..	"	1c. per lb.	6,546,874
Nails, wire of all kinds, N.O.P.	"	1c.	694,051
Pumps, N.E.S.	\$	25 "	207,290
Sad or smoothing, hatters' or tailors' irons, plated wholly or in part or not	"	25 "	9,022
Safes, doors for safes and vaults	"	30 "	99,077
Screws, iron and steel, commonly called 'woodscrews,' N.E.S.	Lbs.	35 "	157,196
Scales, balances, weighing beams and strength testing machines	\$	30 "	94,255
Skates of all kinds and parts thereof	Pairs	35 "	103,430
Stoves of all kinds and parts thereof, N.E.S.	\$	25 "	410,672
Sheets, flat of galvanized iron or steel	Cwt.	5 "	322,523
Carried forward			13,564,734

TABLE 10b—Continued.

IRON.

IMPORTS OF IRON AND STEEL GOODS.

Fiscal Year, 1905.	Duty.	Quantity.	Value.
			\$
Brought forward			13,564,734
Sheet iron or steel corrugated, galvanized.. Cwt.	25 "	4,210	8,713
Sheet iron or steel corrugated not galvanized "	30 "	1,471	2,683
Tubing:			
Boiler tubes of wrought iron or steel, including flues and corrugated tubes for marine boilers.....	\$ 5 %		408,814
Tubes of rolled steel, seamless, not joined or welded, not more than 1½ inches in diameter.....	" 10 "		2,551
Tubes, seamless steel, for bicycles.....	" 10 "		6,154
Tubing, wrought iron or steel, plain or galvanized, threaded and coupled or not, over 2 inches in diameter, N.E.S.	" 15 "		497,727
Tubing, wrought iron or steel, plain or galvanized, threaded and coupled or not, 2 inches or less in diameter, N.E.S.	" 35 "		90,861
Other iron or steel tubes or pipes, N.O.P.	" 30 "		145,686
Ware, galvanized sheet iron or of galvanized sheet steel, manufactures of, N.O.P.	" 25 "		26,255
Ware, agate, granite or enamelled iron or steel hollow ware.....	" 35 "		90,851
Ware, enamelled iron or steel ware, N.E.S., iron or steel hollow ware, plain black, tinned or coated, and nickel and aluminium kitchen or household hollow ware, N.E.S.	" 30 "		181,185
Wire bade ties..... Bundles of 250 ties	30 "	3,061	2,261
Wire cloth or wove wire and netting of iron or steel.....	Lbs. 30 "	1,001,572	45,809
Wire screens, doors and windows.....	\$ 30 "		11,166
Wire fencing, woven, buckthorn strip and wire fencing of iron or steel, N.E.S.	Lbs. 15 "	1,276,757	41,564
Wire, single or several, covered with cotton, linen, silk, rubber or other material, &c., N.E.S.	" 30 "	2,509,696	354,272
Wire of all kinds, N.O.P.	" 20 "	8,962,380	214,599
Wire rope, stranded or twisted wire, clothes lines, picture or other twisted wire and wire cables, N.E.S.	" 25 "	2,002,691	148,236
Iron or steel nuts, washers, rivets and bolts with or without threads and nut bolt and hinge blanks, and T. and strap hinges of all kinds, N.E.S.	" ¼ c.p. lb. and 25 %	3,560,665	124,545
Pen-knives, jack-knives and pocket knives of all kinds.....	\$ 30 %		174,560
Table cutlery, all kinds, N.O.P.	" 30 "		268,482
All other cutlery, N.E.S.	" 30 "		240,261
Guns, rifles, including air guns and air rifles, (not being toys) muskets, cannons, pistols, revolvers, or other firearms...	" 30 "		457,706
Carried forward			17,109,675

TABLE 10b—*Continued*

IRON.

IMPORTS OF IRON AND STEEL GOODS.

Fiscal Year, 1905.	Duty.	Quantity.	Value.
			\$
Brought forward.....			17,109,675
Bayonets, swords, fencing foils and masks.....	30 "		3,234
Needles of any material or kind, not otherwise provided.....	30 "		86,314
Tools and implements:			
Adzes, cleavers, hatchets, wedges, sledges, hammers, crow bars, cant dogs and track tools, picks, mattocks and eyes or poles for the same.....	\$ 30 %		62,218
Axes.....	Doz. 25 "	4,469	24,717
Saws.....	\$ 30 "		176,943
Files and rasps, N.E.S.....	" 30 "		78,012
Tools, hand or machine, of all kinds, N.O.P.....	" 30 "		859,908
Knife blades, or blanks, and forks of iron or steel, in the rough not handled, filed, ground or otherwise manufactured.....	" 10 "		67
Manufactures: articles or wares not specially enumerated or provided for, composed wholly or in part of iron or steel, and whether partly or wholly manufactured.....	" 30 "		2,524,182
Anchors.....	Cwt. Free	3,605	13,736
Iron or steel, rolled round wire rods, in the coil not over $\frac{3}{8}$ -inch in diameter, imported by wire manufacturers for use in making wire in the coil in their own factories.....	" "	634,597	792,078
Iron or steel masts, or parts of.....	" "	18	60
Rolled iron tubes not welded, or joined, under $1\frac{1}{2}$ inch in diameter, angle iron 9 and 10 gauge, not over $1\frac{1}{2}$ inch wide, iron tubing lacquered or brass covered, not over $1\frac{1}{2}$ inch diameter, all of which are to be cut to lengths for the manufacture of bedsteads, and to be used for no other purpose, and brass trimmings for bedsteads imported for the manufacture of iron or brass bedsteads.....	" "		163,329
Steel bowls for cream separators and cream separators.....	\$ "		674,618
Cream separators: articles for the construction or manufacture of—when imported by manufacturers of cream separators to be used in their own factories for the manufacture of cream separators, O.C....	" "		58,859
Steel rails weighing not less than 45 lbs. per lineal yard for use only in the tracks of railways which are employed in the common carrying of goods and passengers, and are operated by steam motive power only.....	Cwt. "	4,249,816	5,051,762
Carried forward.....			27,679,712

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TABLE 10*b*.—*Concluded*.

IRON.

IMPORTS OF IRON AND STEEL GOODS.

Fiscal Year, 1905.	Duty.	Quantity.	Value.
			\$
Brought forward			27,679,712
Steel wire, Bessemer soft drawn spring of Nos. 10, 12 and 13 gauge respectively, and homo steel spring wire of Nos. 11 and 12 gauge, respectively, imported by manufacturers of wire mattresses, to be used in their own factories in the manufacture of such articles.....	"	Free.	4,584
Machinery and structural iron for beet root sugar factories.....	\$	"	9,071
Flat steel wire of No. 16 gauge or thinner imported by the manufacturers of crinoline, corset wire and dress stays, for use in the manufacture of such articles in their own factories.....	Cwt.	"	2,936
Wire, crucible cast steel.....	Lbs.	"	2,113,355
Galvanized iron or steel wire Nos. 9, 12 and 13 gauge....	Cwt.	"	333,845
Barbed fencing wire of iron and steel.....	"	"	411,579
Total.....			29,357,106

TABLE 11.

IRON.

IMPORTS OF PIG IRON, IRON AND STEEL GOODS, &c., FISCAL YEAR, 1904-1905.

Recapitulation of Tables, 7, 8, 9, 10*a* and 10*b*.

	Tons.	Value.
Pig iron	71,005	\$857,879
Pig iron, charcoal.....		
Scrap iron, cast.....	6,533	75,521
Scrap steel, wrought.....	15,479	210,900
Ferro-manganese, &c.....	12,935	246,815
Iron in slabs, blooms, puddled bars, &c.....	15,891	319,665
Iron and steel goods partially manufactured.....		9,711,620
Iron and steel goods more highly manufactured*.....		29,357,106
Total.....		40,779,506

*Machinery, &c., classed under iron and steel goods in Customs report.

LEAD.

The production of lead in Canada has again increased, and shows a total output in 1905 of 56,864,915 pounds as compared with 37,531,244 pounds in 1904, an increase of 19,333,671 pounds or 51 per cent.

The average monthly price of refined lead on the New York market during 1905 was 4.707 cents, which is over 9 per cent higher than the average price in 1904, and is the highest average price received for lead, recorded in the tables which date back to 1887. This high level price, together with the bounty paid on the production of lead ores, have no doubt stimulated the production of the metal, although the output is not yet as great as was attained in 1900, when 63,169,821 pounds were produced without the assistance of any bounty, and when the price of lead was lower than during the past year.

The total amount paid in bounties during the Calendar year 1905, was \$334,224. The payment of bounty on lead in ore exported to Europe, ceased on June 30, 1905, and in the case of ore treated in Canada or exported to the United States, the rate of bounty was gradually diminished, owing to the rise in the price of lead (as per the terms of the bounty act), and all payments ceased in November, when the price of lead reached £16 per long ton.

Previous to 1904, lead ores mined in Canada, were either exported or were reduced in Canadian furnaces to lead bullion carrying gold, silver, etc. which product, was then exported for further treatment.

The Canadian Smelting Works at Trail, B.C. however, has had an electrolytic lead refinery in operation for two years producing pig lead, lead pipe, sheet lead, &c., of exceptional purity. The production of refined lead by this firm has been as follows:—

Year.	Refined lead produced.
1904.....	7,519,440 lbs.
1905.....	15,804,509 "

At the close of 1905, about 50 tons per day were being treated and lead is being supplied to the corroding works recently established by the Carter White Lead Company of Canada, Ltd., at Montreal. The latter plant is equipped with machinery for an immediate capacity of

7000 tons per annum, but is designed for an ultimate capacity of 15,000 tons, and will use Trail lead exclusively.

The whole of the output of lead in 1904 was derived from mines in British Columbia, with the exception of a small amount which was mined by the Ontario Mining and Smelting Company at the Hollandia mine, Bannockburn, Hastings county, Ont., and treated at the Stanley Smelting Works at Bannockburn.

TABLE 1.

LEAD.

ANNUAL PRODUCTION.

Calendar Year.	Pounds.	Price per Pound.	Value.
		cts.	
1887.....	204,800	4 50	\$ 9,216
1888.....	674,500	4 42	29,812
1889.....	165,170	3 93	6,488
1890.....	105,000	4 48	4,704
1891.....	88,665	4 35	3,857
1892.....	808,420	4 09	33,064
1893.....	2,135,023	3 73	79,636
1894.....	5,703,222	3 29	187,636
1895.....	16,461,794	3 23	531,716
1896.....	24,199,977	2 98	721,159
1897.....	39,018,219	3 58	1,396,853
1898.....	31,915,319	3 78	1,206,399
1899.....	21,862,436	4 47	977,250
1900.....	63,169,821	4 37	2,760,521
1901.....	51,900,958	4 334	2,249,387
1902.....	22,956,381	4 069	934,095
1903.....	18,139,283	4 237	768,562
1904.....	37,531,244	4 309	1,617,221
1905.....	56,864,915	4 707	2,676,632

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Exports of lead in ore, according to Customs returns were 7,284 tons to the United States and 20,175 to other countries, or a total export of lead of 20,852 tons, equivalent to a little over 78 per cent. of the total output.

Statistics of exports and imports are given in the following tables:

TABLE 2.

LEAD.

EXPORTS

Calendar Year.	Value.
1873	\$1,993
1874	127
1875	7,510
1876	66
1877	720
1878	
1879	230
1880	
1881	
1882	32
1883	5
1884	36
1885	
1886	
1887	724
1888	18
1889	
1890	
1891	5,000
1892	2,509
1893	3,099
1894	144,509
1895	435,071
1896	462,095
1897	925,144
1898	885,485
1899	466,950
1900	1,917,690
1901	1,804,687
1902	457,170
1903	426,466
1904	559,461
1905	1,046,541

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TABLE 3.

LEAD.

IMPORTS OF LEAD.

Fiscal Year.	OLD, SCRAP AND PIG.		BARS, BLOCKS, SHEETS.		TOTAL.	
	Cwt.	Value.	Cwt.	Value.	Cwt.	Value.
1880					30,298	\$124,117
1881	16,236	\$ 56,919	18,222	\$70,744	34,458	127,663
1882	36,655	120,870	10,540	35,728	47,195	156,598
1883	48,780	148,759	8,591	28,785	57,371	177,544
1884	39,409	103,413	9,704	28,458	49,113	131,871
1885	36,106	87,038	9,362	24,396	45,468	111,434
1886	39,945	110,947	9,793	28,948	49,738	139,895
1887	61,160	173,477	14,153	41,746	75,313	215,223
1888	68,678	196,845	14,957	45,900	83,635	242,745
1889	74,223	213,132	14,173	43,482	88,396	256,614
1890	101,197	283,096	19,083	59,484	120,280	342,580
1891	86,382	243,033	15,646	48,220	102,028	291,253
1892	97,375	254,384	11,299	32,368	108,674	286,752
1893	94,485	215,521	12,403	32,286	106,888	247,807
1894	70,223	149,440	8,486	20,451	78,709	169,891
1895	67,261	139,290	6,739	16,315	74,000	155,605
1896	72,433	173,162	8,575	23,169	81,008	196,331
1897	65,279	158,381	10,516	29,175	75,795	187,556

Fiscal Year.	OLD, SCRAP, PIG AND BLOCK.*		BARS AND SHEETS.†		TOTAL.	
	Cwt.	Value.	Cwt.	Value.	Cwt.	Value.
1898	88,420	\$260,779	22,214	\$39,041	110,634	\$299,820
1899	114,659	283,432	44,796	39,833	159,455	323,265
1900	62,361	207,819	15,493	53,506	77,854	251,325
1901	(a) 85,321	97,011	16,295	78,316	101,616	175,327
1902	(a) 122,279	104,672	18,596	49,261	140,875	153,933
1903	(a) 98,530	67,821	11,535	35,398	110,065	103,219
1904	(a) 94,602	121,165	14,102	39,644	108,704	160,809
1905	(a) 57,074	133,775	17,792	51,972	74,866	185,747

* Duty 15 p. c.

† Duty 25 p. c.

(a) Includes Canadian lead ore sent to the United States for refining, imported at price of refining only.

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TABLE 4.

LEAD.

IMPORTS OF LEAD MANUFACTURES.

Fiscal Year.	Value.	Fiscal Year.	Value.
1880.....	\$15,400	1893.....	\$ 33,783
1881.....	22,629	1894.....	29,361
1882.....	17,282	1895.....	38,015
1883.....	25,556	1896.....	50,722
1884.....	31,361	1897.....	60,735
1885.....	36,340	1898.....	63,179
1886.....	33,078	1899.....	91,497
1887.....	19,140	1900.....	104,736
1888.....	18,816	1901.....	107,260
1889.....	16,315	1902.....	120,020
1890.....	25,600	1903.....	134,151
1891.....	23,893	1904.....	129,093
1892.....	22,636		

	Duty.	Cwt.	
1905. { Lead Tea.....	Free.	17,648	\$ 71,369
" Pipe.....	35 p. c.	1,649	7,273
" Shot and bullets.....	35 "	1,241	4,512
" Manufactures, N.E.S.....	30 "		64,023
Total.....			\$147,177

TABLE 5.

LEAD.

IMPORTS OF LITHARGE.

Fiscal Year.	Cwt.	Value.	Fiscal Year.	Cwt.	Value.
1880.....	3,041	\$14,334	1893.....	7,685	\$24,401
1881.....	6,126	22,129	1894.....	38,547	28,685
1882.....	4,900	16,651	1895.....	11,955	32,953
1883.....	1,532	6,173	1896.....	10,710	32,817
1884.....	5,235	18,132	1897.....	12,028	34,538
1885.....	4,990	16,156	1898.....	11,446	32,904
1886.....	4,928	16,003	1899.....	9,530	32,518
1887.....	6,397	21,865	1900.....	9,139	29,176
1888.....	7,010	23,808	1901.....	11,132	51,944
1889.....	8,089	31,082	1902.....	13,002	47,021
1890.....	9,453	31,401	1903.....	13,921	47,761
1891.....	7,979	27,613	1904.....	9,894	32,633
1892.....	16,384	34,343	1905 ... Duty free	17,865	57,736

In July, 1905, the duty on dry white lead was increased from 5 per cent to 30 per cent, and on white lead ground in oil to 35 per cent, while the duty on red lead, orange mineral and zinc white remained at 5 per cent.

Statistics of the imports of white lead, etc., are given in table 6 following.

TABLE 6.

LEAD.

IMPORTS OF DRY WHITE AND RED LEAD AND ORANGE MINERAL.

	Fiscal Year.	Pounds.	Value.
			\$
a	1885.....	5,404,753	198,913
	1886.....	6,703,077	213,258
	1887.....	6,998,820	233,725
	1888.....	6,361,334	216,654
	1889.....	7,066,465	267,236
b	1890.....	10,859,672	381,959
	1891.....	8,560,615	337,407
	1892.....	10,288,766	351,686
	1893.....	10,865,183	364,680
	1894.....	10,958,170	353,053
	1895.....	8,780,052	282,353
	1896.....	11,711,496	367,569
	1897.....	10,310,463	347,539
	1898.....	12,682,808	448,659
	1899.....	14,507,945	514,842
	1900.....	14,679,920	634,492
	1901.....	10,241,601	461,368
	1902.....	15,584,164	603,582
	1903.....	19,208,786	758,371
	1904.....	16,925,585	662,098
	(c) 1905 Duty, 5 p.c.	17,376,588	638,381

(a) Imports of dry white and red lead and orange mineral.

(b) Imports of dry white and red lead, orange mineral and zinc white.

(c) Imports of dry white and red lead.

Statistics of lead production in British Columbia, comprising the greater part of the output in Canada are given separately in table 7, while the details by districts for the past four years are given in table 8. The increase in output over the previous year is over 54 per cent

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and with the exception of the production attained in 1900, the output is the largest ever mined in British Columbia. The Slocan has fallen away behind in relative importance as a lead producing district, over 86 per cent of the output having been obtained in Fort Steele division and less than 10 per cent in the Slocan.

TABLE 7.

LEAD.

BRITISH COLUMBIA: PRODUCTION.

Calendar Year.	Pounds.	Price per Pound.	Value.
		cts.	
1887.....	204,800	4 50	\$ 9,216
1888.....	674,500	4 42	29,813
1889.....	165,100	3 93	6,488
1890.....	Nil.		
1891.....	"		
1892.....	808,420	4 09	33,064
1893.....	2,131,092	3 73	79,490
1894.....	5,703,222	3 29	187,636
1895.....	16,461,794	3 23	531,716
1896.....	24,199,977	2 98	721,159
1897.....	38,841,135	3 58	1,390,513
1898.....	31,693,559	3 78	1,198,017
1899.....	21,862,436	4 47	977,250
1900.....	63,158,621	4 37	2,760,031
1901.....	51,582,906	4 334	2,235,603
1902.....	22,536,381	4 069	917,005
1903.....	18,089,283	4 237	766,443
1904.....	36,646,244	4 309	1,579,086
1905.....	56,580,703	4 707	2,663,254

TABLE 8.

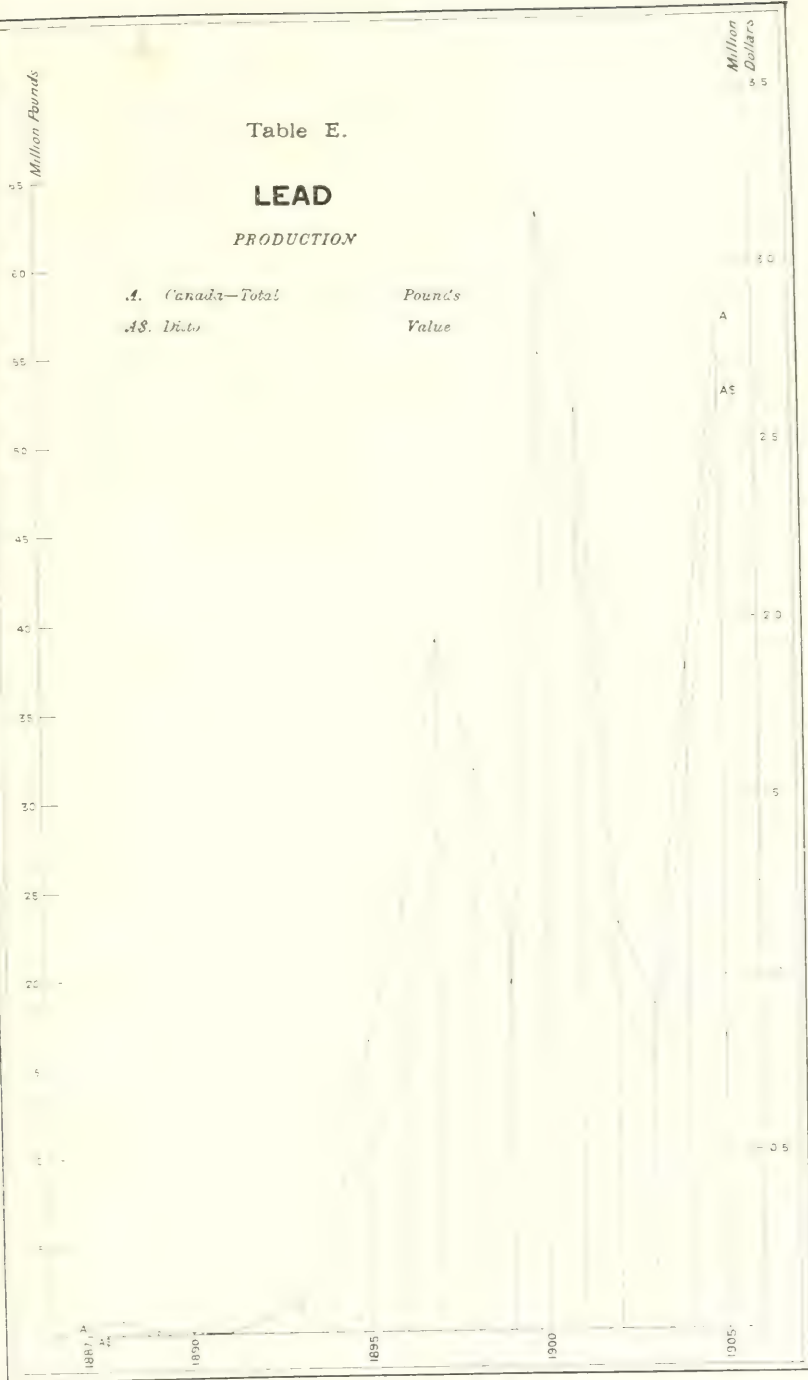
LEAD.

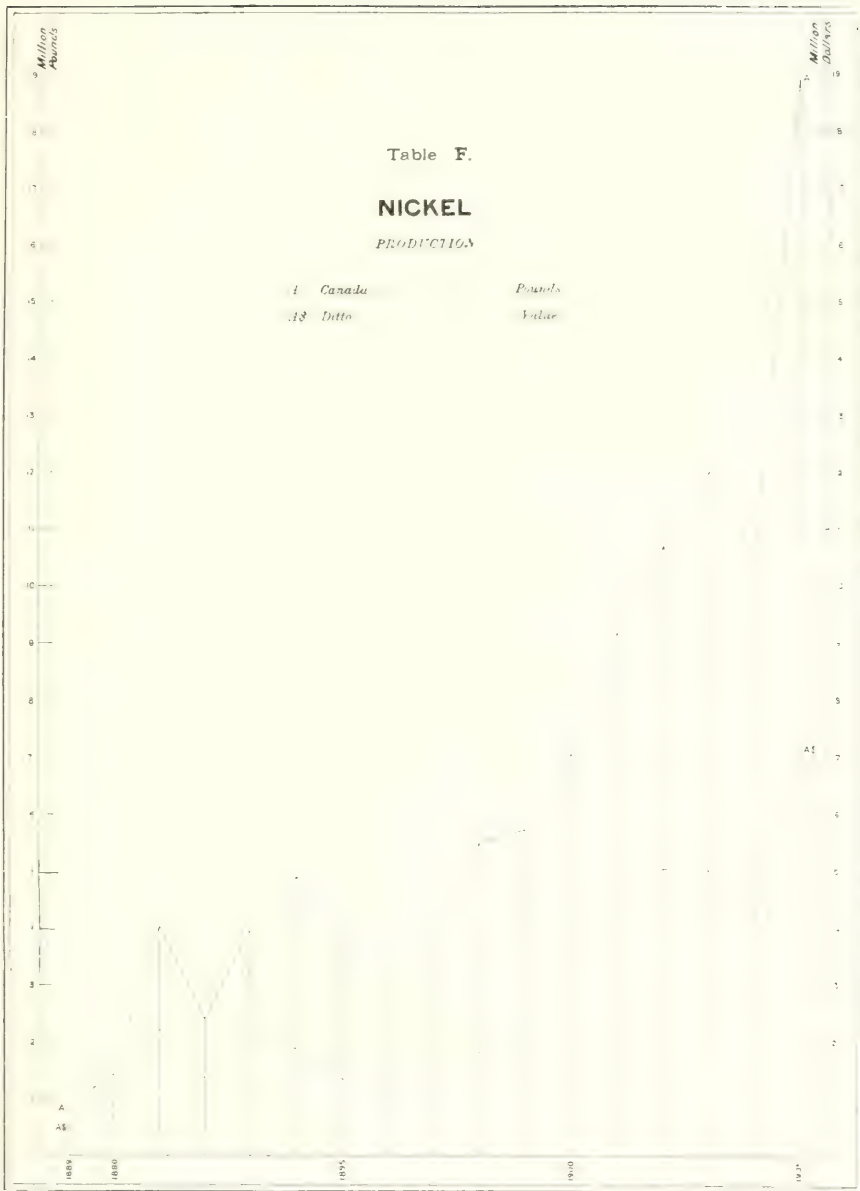
BRITISH COLUMBIA: PRODUCTION BY DISTRICTS.

	1902.	1903.	1904.	1905.
	Pounds.	Pounds.	Pounds.	Pounds.
Cassiar.....				5,500
East Kootenay—				
Fort Steele.....	3,017,756	717,479	21,071,236	48,248,828
Other districts.....	204,652	951,296	401,022	149,584
West Kootenay—				
Ainsworth.....	3,083,039	4,299,727	3,091,648	1,002,114
Nelson.....	1,680,948	1,072,542	976,570	1,368,388
Slocan.....	13,651,144	9,880,469	10,611,227	5,399,330
Other districts.....	885,734	1,144,239	485,520	339,883
Yale.....	13,108	23,531	9,021	67,076
	22,536,381	18,089,283	36,646,244	56,580,703

The Provincial Mineralogist remarks—"In the Fort Steele Mining division of East Kootenay the St. Eugene mine has this year more than doubled its output of the previous year, despite the fact that several months were lost at the most important opening through the head works being completely destroyed by fire. The property is a large low grade concentrating proposition, galena, low in silver in a siliceous gangue. This years output was nearly 150,000 tons of ore, producing about 900,000 ounces of silver and 36,500,000 lbs. of lead, the largest lead production of any property in British Columbia, and about 65 per cent of the total production of the Province. The North Star, which has been for many years one of the largest and steadiest producers of silver-lead ore, has been worked out and practically abandoned, as development on an extensive scale, failed to disclose further ore bodies, and the small shipments made this year are only the results of the clearing out of the workings.

"With the passing of the North Star, an adjacent property, the Sullivan, has taken its place, and is today the second largest lead producer in the Province, producing nearly 11,500,000 lbs of lead or 20 per cent of the production of the Province."





NICKEL.

The production of nickel (contents of matte shipped) from the copper-nickel ores of the Sudbury district of Ontario, reached a total of 18,876,315 lbs. in 1905, the largest output ever reached in the district, being over twice the production of 1901 and an increase of 8,328,432 lbs. or nearly 79 per cent. over 1904.

The value of the output in 1905 at the average price of refined nickel in New York, 40 cents per pound, was \$7,550,526. The companies employed in mining nickel ores were as follows:—

The Canadian Copper Company (The International Nickel Co.) Copper Cliff, Ont. and New York.

The Mond Nickel Company, Victoria Mines, Ont. and London, England.

The Lake Superior Power Company (The Lake Superior Corporation) Sault Ste. Marie, Ont.

The first two only were operating smelting plants during the year. Details of the production of ore, matte, etc., in 1905 were as follows:

	Tons of 2,000 lbs.
Ore mined.....	277,766 tons.
Ore smelted.....	251,421 "
Matte produced.....	17,388 "
Matte shipped.....	17,405 "
Matte in stock at end of year.....	2,675 "
Copper contents of matte shipped.....	4,386 "
Nickel.....	9,438 "
Value of matte shipped.....	\$4,019,814.

According to Customs returns, exports of nickel in matte, etc., were for the twelve months ending Dec. 31, as follows:

To Great Britain.....	1,281,594 lbs.
To United States.....	16,036,465 "
Total.....	17,318,059 "

The price of refined nickel remained fairly steady throughout the year; according to the 'Engineering and Mining Journal' of New York, quotations for large lots, New York or other parallel delivery, were 40 to 47 cents per pound, according to size and condition of order. For small quantities prices ranged from 48 to 60 cents, also according to size for order and delivery.

Some of the ores from the now famous Cobalt district contain from 4 to 7 per cent. of nickel in addition to the cobalt, silver and arsenic, but no statistics of production of nickel from this district have been available for inclusion in the table of production.

TABLE 1.

NICKEL.

ANNUAL PRODUCTION.

Calendar Year.	Pounds of Nickel in Matte.	Final Average Market Price per lb. at New York.	Value.
1889.....	*830,477	60c.	\$ 498,286
1890.....	1,435,742	65c.	933,232
1891.....	4,035,347	60c.	2,421,208
1892.....	2,413,717	58c.	1,399,956
1893.....	3,982,982	52c.	2,071,151
1894.....	4,907,430	38½c.	1,870,958
1895.....	3,888,525	35c.	1,360,984
1896.....	3,397,113	35c.	1,188,990
1897.....	3,997,647	35c.	1,399,176
1898.....	5,517,690	33c.	1,820,838
1899.....	5,744,000	36c.	2,067,840
1900.....	7,080,227	47c.	3,327,707
1901.....	9,189,047	50c.	4,594,523
1902.....	10,693,410	47c.	5,025,903
1903.....	12,505,510	40c.	5,002,204
1904.....	10,547,883	40c.	4,219,153
1905.....	18,876,315	40c.	7,550,526

* Calculated from shipments made by rail.

TABLE 2.

NICKEL.

EXPORTS.*

Calendar Year.	Value.	Calendar Year.	Value.
1890.....	\$ 89,568	1898.....	\$ 1,019,363
1891.....	667,280	1899.....	939,915
1892.....	293,149	1900.....	1,031,030
1893.....	629,692	1901.....	751,080
1894.....	559,356	1902.....	1,007,211
1895.....	521,783	1903.....	1,116,099
1896.....	658,213	1904.....	1,091,349
1897.....	723,130	1905.....	1,569,693

* Practically all the nickel-bearing ore and matte produced in Canada is exported, the apparent discrepancy between Tables Nos. 1 and 2 being due to the different basis of valuation adopted in the two instances. Table 1 represents the total final values of the nickel produced in Canada, for the years represented. In Table 2 the worth of the product shipped is entered at its spot value to the operators, and depends upon the particular stage to which they happen to carry the process of extraction at the time, *e.g.*, whether the shipments made are raw ore, low grade matte or high grade matte, &c.

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TABLE 3.

NICKEL.

IMPORTS.

Calendar Year.		Value.
1890		\$ 3,154
1891		3,889
1892		3,208
1893		2,905
1894		3,528
1895		4,267
1896		4,787
1897		4,737
1898		5,882
1899		9,449
*1900		6,988
1901		12,029
1902		15,448
1903		26,177
1904		14,682
		Duty.
1905	(Nickel anodes	10 p. c. 15,351
	(Nickel	Free. 3,725
		\$ 19,076

* Classified under the general heading of minerals in the Trade and Navigation Report.

ZINC.

The zinc smelting plant being erected at Frank, Alberta, by the Canadian Metal Company, Limited, was not yet completed at the close of 1905 consequently there was not any production of spelter to report in Canada.

The total shipments of zinc ore, concentrates, etc., during the year were 9,413 tons, valued at \$139,200, derived altogether from mines in British Columbia. No returns have been received of any production in Ontario.

TABLE 1.
ZINC.
ANNUAL PRODUCTION OF ZINC.

Calendar Year.	Zinc Ore Shipped		Metallic Zinc in Ore Shipped.	
	Tons.	Spot Value	Pounds.	Final Value.
1898.....	1,162	\$ 11,000	788,000	\$ 36,011
1899.....	865	18,165	814,000	46,805
1900.....	261	4,810	212,000	9,342
1901.....				
1902.....	158	1,659	142,200	6,882
1903.....	1,000	10,500	900,000	48,660
1904.....	597	3,700	477,568	24,356
1905.....	9,413	139,200	*	*

*Figures not available.

TABLE 2.
ZINC.
IMPORTS OF ZINC IN BLOCKS, PIGS AND SHEETS.

Fiscal Year.	Cwt.	Value.	Fiscal Year.	Cwt.	Value.
1880.....	13,805	\$67,881	1893.....	26,446	124,360
1881.....	20,920	94,015	1894.....	20,774	90,680
1882.....	15,021	76,631	1895.....	15,061	63,373
1883.....	22,765	94,799	1896.....	20,223	80,784
1884.....	18,945	77,373	1897.....	11,946	57,754
1885.....	20,954	70,598	1898.....	35,148	112,785
1886.....	23,146	85,599	1899.....	18,785	107,477
1887.....	26,142	98,557	1900.....	28,748	156,167
1888.....	16,407	65,827	1901.....	20,527	103,457
1889.....	19,782	83,935	1902.....	34,871	141,560
1890.....	18,236	92,530	1903.....	26,646	142,827
1891.....	17,984	105,023	1904.....	25,553	138,057
1892.....	21,881	\$127,302	1905 Duty free	25,141	141,514

TABLE 3.
ZINC.
IMPORTS OF SPELTER.

Fiscal Year.	Cwt.	Value.	Fiscal Year.	Cwt.	Value.
1880.....	1,073	\$ 5,310	1893.....	10,721	\$49,822
1881.....	2,904	12,276	1894.....	8,423	35,615
1882.....	1,654	7,779	1895.....	9,249	30,245
1883.....	1,274	5,196	1896.....	10,897	40,548
1884.....	2,239	10,417	1897.....	8,342	32,826
1885.....	3,325	10,875	1898.....	2,794	13,561
1886.....	5,432	18,238	1899.....	5,450	29,687
1887.....	6,908	25,007	1900.....	5,836	29,416
1888.....	7,772	29,762	1901.....	14,621	58,283
1889.....	8,750	37,403	1902.....	18,356	80,757
1890.....	14,570	71,122	1903.....	23,159	110,817
1891.....	6,249	31,459	1904.....	33,952	164,751
1892.....	13,909	62,550	1905Duty free	37,941	206,244

*Spelter in blocks and pigs.

TABLE 4.
ZINC.
IMPORTS OF ZINC, MANUFACTURES OF.

Fiscal Year.	Value.	Fiscal Year.	Value.
1880.....	\$ 8,327	1893.....	\$ 7,464
1881.....	20,178	1894.....	6,193
1882.....	15,526	1895.....	5,581
1883.....	22,599	1896.....	6,290
1884.....	11,952	1897.....	5,145
1885.....	9,459	1898.....	10,503
1886.....	7,345	1899.....	14,661
1887.....	6,561	1900.....	11,475
1888.....	7,402	1901.....	6,882
1889.....	7,233	1902.....	6,683
1890.....	6,472	1903.....	9,754
1891.....	7,178	1904.....	12,682
1892.....	7,563		
1905 { Zinc seamless drawn tubing.....		Duty.	
{ " manufactures of, N.O.P.....		Free.	
		25 %	\$ 11,912
Total.....			11,912

This is the first record of shipments of zinc ore from British Columbia. The shipments of zinc ore previous to 1905, shown in table 1, were derived from mines in Eastern Canada, spasmodically operated, chiefly the Calumet mines on Calumet island, Pontiac county, Quebec; the Zenith mine near Rossport Station, Canadian

Pacific Railway, Thunder Bay district, Ont., and the Richardson mine, Frontenac county, Ont.

The following notes on zinc ore mining in British Columbia have been taken from the report of the Minister of Mines for the Province for 1905 :—

“This year, for the first time, have any important sales of zinc ore to be recorded. Plants for the ‘enrichment’ of zinc ores have been started at Kaslo, Roseberry and Pilot bay. These plants are merely concentrators, in which ores, or ordinary zinc concentrates, are more carefully separated, with the elimination, of minerals undesirable in the smelting of zinc ores, such as iron pyrites or carbonate, galena and gangue matter.

“The resulting ‘enriched’ zinc concentrates, thus rendered saleable, have found a ready market, at prices varying according to the zinc contents and freedom from impurities, from about \$25 a ton for 53 per cent. zinc in a pure ore, to about \$10 a ton for a 40 per cent. zinc ore not so free from impurities.

“Approximately 9,413 tons of zinc ore or zinc concentrates were sold this past year, having a value at point of shipment of about \$139,200.

“Almost all of this zinc ore comes from the Slocan district, but has not been all mined this past year, as the sales include zinc concentrates which have accumulated and for which only this year has a market been found.

“As yet, most of the zinc ore sold has gone to the United States, but a zinc smelting plant having this year been erected at Frank, in Alberta, just east of the British Columbia boundary, in all probability the larger part of the British Columbia output will in future be treated there.*

“A commission appointed by the Dominion Government, and including Mr. W. R. Ingalls, of New York, and Mr. Philip Argall, of Colorado, spent the season of 1905 in investigating the possibilities of zinc ore mining in British Columbia and methods of treating the ore. The report of this commission has not as yet been published.†

“Practical demonstrations of smelting zinc-lead ores by electricity were, upon two occasions, attempted at Vancouver, to witness which the Provincial Government was invited to send a representative. Mr. Carmichael, the Provincial Assayer, who was present, reports that the demonstrations did not succeed, for reasons which, he hopes, may yet be overcome.

* This plant was completed in June, 1906, and spelter first turned out during that month. Notes by Mr. Theo. Denis on the equipment at this plant will be found at the end of this article.

† The report of this commission was issued 1906.

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"Of the undeveloped properties carrying strictly zinc ores those on Pingston creek, in the Arrow lake mining division, present the greatest surface showing"

Zinc Smelter at Frank, Alberta.

The Canadian Metal Company, Ltd., a syndicate composed mainly of French capitalists, has erected at Frank, Alberta, a large zinc smelting plant where it is intended to treat all these ores which were previously sent to United States smelters. The new plant will produce spelter, and it is also the intention to make provision to save the silver contents of the zinc ores.

The Canadian Metal Company has also purchased several zinc properties in the Slocan district, and intends to start work on them immediately. They have acquired the Pilot Bay smelter, which they will transform into a concentrating and enriching plant. Moreover, they own coal lands at Frank, and they are at present developing a coal mine within a few hundred feet of the smelter.

The smelter is situated at Frank, Alberta, on the Crows nest line of the Canadian Pacific Railway, within twelve miles of the boundary between Alberta and British Columbia. This location was decided upon on account of its being a coal producing centre.

The ores treated are the British Columbia zinc ores, both crude and concentrated. The smelter is capable of treating 60 tons of ore per day, and provision has been made for an increase to a capacity of 120 tons.

The following are average analyses of the ores treated at the smelter :—

Zinc ore, Slocan district—Lead, 3 per cent ; zinc, 48 per cent ; iron, 7 per cent ; silica, 8 per cent ; lime, traces ; silver, 10 oz. per ton.

Roasted ore—Lead, 3·2 ; zinc, 42·9 per cent ; iron, 6·5 per cent ; lime, 7·0 ; sulphur, (due to lime) 3·9.

The process adopted in the smelter is simple. The zinc ores are crushed and sampled and stored in bins. The smelting process comprises a roasting in furnaces, which converts the zinc sulphide into zinc oxide. This is mixed with the proper proportion of a reducing agent, which is here coal dust ; this mixture is distilled, the metallic zinc resulting cast into plates, and the residue from the distillation saved and treated for silver contents.

The crushing and sampling plant comprises :

One Allis-Chalmers vertical crusher.

Steel crushing rolls, 26 in. x 20 in.

Automatic sampler.

Bucket elevators.

Shaking screens (Jeffrey).

Screw and belt conveyors.

The ore, after being weighed, is dumped into the vertical crusher. The crushed product is raised to the shaking screen (10 mesh) where it is separated into coarse and fine. The coarse, which goes over 10 mesh, is sent to the rolls by means of a screw conveyor, and screened again. This cycle is repeated until all the ore goes through the screen. The screened ore is conveyed to the automatic sampler, whence a bucket elevator and a chain conveyor with steel disks, distribute it into the ore bins, which have a capacity of 900 tons. These are discharged from below, into cars which convey the ore to the roasting furnaces. It is dumped into the pit of a bucket elevator, which raises it, and it is then distributed to the roasting furnaces by a screw conveyor. The roasting is done in Merton furnaces equipped with mechanical rakes and water jacketed. They consist of five chambers, or shelves, placed one above the other, and of a hearth twelve feet in diameter where the process is completed. The fuel used is producer gas. The ore moves in a direction opposite to the flow of gas. These furnaces are entirely new as applied to the zinc industry and were constructed by the Union Iron Works of San Francisco. There are four of them, and space for increasing the number to eight.

The mixing of roasted ore and coal dust (reducing agent) is done in two pug-mills.

The ore from the roasting furnaces is first allowed to cool on a cooling floor, then dumped into the pug-mills with the right proportion of coal dust. The mixture is then raised by a bucket elevator, loaded on cars, and sent to the distillation furnaces. These are arranged into five groups of 240 retorts each, in four horizontal tiers, gas firing, with regenerator for air only. The current of gas is reversed every half hour.

The gas plant comprises 4 producers of a diameter of 9 ft. 6 in. and two of 8 ft., Taylor system, water gas, with hydraulic joints. The coal, which is obtained from the Canadian Metal Company's own mine, is stored in the gas producer building. The pottery comprises a pug-mill, crusher for fire-clay; a Mahler hydraulic press for muffles, &c.; stamp mill for clay. All the refractory bricks used in the smelter were made in the pottery. The clay has to be imported from St. Louis, Missouri, as no satisfactory clay has yet been found near at hand.

There are three engines in various parts of the smelter, two of 35 h.p. and one of 60 h.p.

There are also well equipped machine and carpenter shops, laboratories, offices, &c.

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MISCELLANEOUS METALLIC.

ALUMINIUM.

The Northern Aluminium Company have extensive works at Shawenegan Falls, Que., where they manufacture aluminium from ores imported from France and Germany. They have also a well equipped wire mill where the metal is made into aluminium wire and cables which are now used extensively in transmission of electricity. No Canadian raw material is used, but it is interesting to mention the industry inasmuch that it may stimulate search and prospecting for ores of aluminium. The Northern Aluminium Company use bauxite imported from France and Germany.

ANTIMONY.

The mining of antimony ores in Canada has been exceedingly irregular, as, previous to 1905, no production has been reported since 1898. In-1905 the auriferous antimony ores at West Gore, Hants county, Nova Scotia, were actively worked, about 20 men being employed. Not only was a considerable tonnage of ore mined but a good deal of experimenting was done during the year, in order to more fully recover the gold values and concentrate the antimony to save heavy freight rates now paid.

A description of the development of the mines and of different methods of treating the ore will be found in the report of the Department of Mines of Nova Scotia for 1905 pages 69 to 108.

According to the same report, there were mined about 4,000 tons of ore divided into two classes as follows:—

430 tons said to contain 46 per cent antimony and 5.56 ounces of gold per ton.

3,570 tons, said to contain 8 per cent antimony and \$10 in gold per ton.

There were shipped to english smelter companies 527 tons of mined ore containing gold valued at \$24,657. (Antimony contents not stated.)

TABLE 1.
MISCELLANEOUS.
METALLIC.

ANNUAL PRODUCTION OF ANTIMONY ORE.

Calendar Year.	Tons.	Value.
1886	665	\$31,490
1887	584	10,860
1888	345	3,696
1889	55	1,100
1890	26½	625
1891	10	60
1892 to 1897	Nil.	Nil.
1898	1,344	20,000
1899 to 1904	Nil.	Nil.
1905	527	.....

TABLE 2.
MISCELLANEOUS.
METALLIC.
EXPORTS OF ANTIMONY ORES.

Calendar Year.	Tons.	Value.	Calendar Year.	Tons.	Value.
1880.....	40	\$ 1,948	1890.....	38	\$ 1,000
1881.....	34	3,308	1891.....	3½	60
1882.....	323	11,673	1892 to 1897..	Nil.	Nil.
1883.....	165	4,200	1898.....	1,232	15,295
1884.....	483	17,875	1899.....	6½	190
1885.....	758	36,250	1900.....	210	3,441
1886.....	665	31,490	1901.....	10	1,643
1887.....	229	9,720	1902.....	90	13,658
1888.....	352½	6,894	1903.....	33	4,332
1889.....	30	695	1904.....	160	7,237
			1905.....	525	27,118

TABLE 3.
MISCELLANEOUS.
METALLIC.
IMPORTS OF ANTIMONY.

Fiscal Year.	Pounds.	Value.	Fiscal Year.	Pounds.	Value.
1880.....	42,247	\$ 5,903	1892.....	180,308	17,680
1881.....		7,060	1893.....	181,823	14,771
1882.....	183,597	15,044	1894.....	139,571	12,249
1883.....	105,346	10,355	1895.....	79,707	6,131
1884.....	445,600	15,564	1896.....	163,209	9,557
1885.....	82,012	8,182	1897.....	134,661	8,031
1886.....	89,787	6,951	1898.....	156,451	12,350
1887.....	87,827	7,122	1899.....	289,066	16,851
1888.....	120,125	12,242	1900.....	186,997	20,001
1889.....	119,034	11,206	1901.....	350,737	24,714
1890.....	117,066	17,439	1902.....	504,822	39,276
1891.....	114,084	17,483	1903.....	868,146	65,434
			1904.....	418,943	27,112
			Duty.		
1905	Antimony, or regulus of, not ground, pulverized or otherwise manufactured.		Free.	92,785	6,664
	Antimony salts.....		"	93,669	6,164
Total.....				186,454	12,828

COBALT.

According to returns made to the Ontario Bureau of Mines the production of cobalt in 1904 was 29 tons, valued at \$36,620, derived partly from the nickeliferous ores of the Sudbury district and partly from the silver-cobalt arsenides of Coleman township. In 1905, accord-

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ing to the same authority, the production of the latter district, was 120 tons, valued at \$100,000.

MERCURY.

There has been no production of mercury since 1897. The small production reported in 1895, 1896 and 1897, was derived from the deposits at the western end of Kamloops lake, B.C. These deposits consist of quartz veins containing pockets of cinnabar. These veins are in a zone of decomposed volcanic rock of Tertiary age.

TABLE 4.
MISCELLANEOUS.
METALLIC.

PRODUCTION OF MERCURY.

Calendar Year.	Flasks (76½ lbs.)	Price per flask.	Value.
1895	71	\$ 33 00	\$ 2,343
1896	58	33 44	1,940
1897	9	36 00	324

TABLE 5.
MISCELLANEOUS.
METALLIC.
IMPORTS OF MERCURY.

Fiscal Year.	Pounds.	Value.
1882	2,443	\$ 965
1883	7,410	2,991
1884	5,848	2,441
1885	14,490	4,781
1886	13,316	7,142
1887	18,409	10,618
1888	27,951	14,943
1889	22,931	11,844
1890	15,912	7,677
1891	29,775	20,223
1892	30,936	15,038
1893	50,711	22,998
1894	36,914	14,483
1895	63,732	25,703
1896	77,869	32,343
1897	76,058	33,534
1898	59,759	36,425
1899	103,017	51,695
1900	85,342	51,987
1901	140,610	94,564
1902	97,283	56,615
1903	164,968	91,625
1904	151,107	80,658
1905 Duty free	103,330	48,412

PLATINUM.

Although the occurrence of platinum in the placer gravels is so wide spread throughout British Columbia, only about \$500 worth was obtained from gravels near Granite creek, Similkameen. While the Consolidated Cariboo Hydraulic Mining Company of Cariboo, and the Berry Creek Mining Company of Thiebert creek, Cassiar, each recovered small quantities in an experimental way. The manager of the latter company reports—"Experiments were made to concentrate the black sands containing minerals belonging to the platinum group. For this purpose an undercurrent and a series of tables covered with cocoa matting, canvas and burlap, were installed at the end of No. 2 sluice.

"Although it was this year largely experimental, the mechanical concentration was quite satisfactory. During the 21 days that the concentrating plant was in operation it yielded 250 pounds of concentrates, and this amount could have been greatly increased by a man in attendance with some experience in concentration.

"Assays of these concentrates, made at the British Columbia Government Assay Office, gave 60 ounces of platinum to the ton of concentrates, and assays obtained in San Francisco gave up to 15 ounces of platinum and 7 ounces of gold per ton. These results were obtained almost entirely from top gravel, and as the bottom gravels will naturally contain more of the heavier minerals the concentrates from the latter should be very much better than this year's output."

TABLE 6.

MISCELLANEOUS.

METALLIC.

ANNUAL PRODUCTION OF PLATINUM.

Calendar Year.	Value.	Calendar Year.	Value.
1887.....	\$ 5,600	1897.....	\$ 1,600
1888.....	6,000	1898.....	1,500
1889.....	3,500	1899.....	825
1890.....	4,500	1900.....	Nil.
1891.....	10,000	1901.....	457
1892.....	3,500	1902.....	46,502
1893.....	1,800	1903.....	33,345
1894.....	950	1904.....	10,872
1895.....	3,800	1905.....	500
1896.....	750		

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TABLE 7.
MISCELLANEOUS.
METALLIC.
IMPORTS OF PLATINUM.

Fiscal Year.	Value.	Fiscal Year.	Value.
1883.....	\$ 113	1895.....	\$3,937
1884.....	576	1896.....	6,185
1885.....	792	1897.....	9,031
1886.....	1,154	1898.....	9,781
1887.....	1,422	1899.....	9,671
1888.....	13,475	1900.....	57,910
1889.....	3,167	1901.....	20,263
1890.....	5,215	1902.....	19,357
1891.....	4,055	1903.....	21,251
1892.....	1,952	1904.....	28,112
1893.....	14,082	1905.....	61,719
1894.....	7,151		

* Platinum wire and platinum in bars, strips, sheets or plates, platinum retorts, pans, condensers, tubing and pipe, imported by manufacturers of sulphuric acid for use in their works. Duty free.

The larger production shown for the years 1902, 1903, 1904 was obtained from the ores of the Sudbury district, Ontario, or rather it was derived from the residues accumulated during a number of previous years during the treatment of the nickel copper mattes shipped from this district.

PALLADIUM.

It has been known for a long time that palladium was present in the nickel ore of the Sudbury district, but in past years no definite information could be obtained as to whether the metals of the platinum group were saved in the treatment which the ores and mattes underwent. As far back as 1889 it was discovered that sperrylite, the arsenide of platinum, which is present in the Sudbury ores, contained traces of palladium, but the occurrence was noted as being only of mineralogical interest. Of late years, however, the sources of platinum have not been able to supply the demand and palladium is being considered as a possible substitute on account of its malleability and high melting point (Palladium 1500°C, Platinum 1750°C).

The metal palladium is now being recovered from the Sudbury ores and according to figures received by the Ontario Bureau of Mines, the production for the past three years has been as follows :

	Ounces	Value
1902.....	4,411	\$86,014
1903.....	3,177	61,952
1904.....	952	18,564

The high figures for 1902 and 1903 are perhaps due to working over some accumulation of old residue from matte treated in previous years.

TIN.

No deposits of tin of an economic nature, have yet been discovered in Canada, although reports that tin ores have been discovered in large quantities in this country are very frequent. We give in the table below, figures relating to the Canadian tin trade.

TABLE 8.
MISCELLANEOUS.
METALLIC.
IMPORTS OF TIN AND TINWARE.

Fiscal Year.	Value.	Fiscal Year.	Value.
1880.....	\$ 281,880	1893.	\$1,242,994
1881.....	413,924	1894.....	1,310,389
1882.....	790,285	1895.....	973,397
1883.....	1,274,150	1896.....	1,237,684
1884.....	1,018,493	1897.....	1,274,108
1885.....	1,060,883	1898.....	1,550,851
1886.....	1,117,368	1899.....	1,372,813
1887.....	1,187,312	1900.....	2,418,455
1888.....	1,164,273	1901.....	2,339,109
1889.....	1,243,794	1902.....	2,293,958
1890.....	1,289,756	1903.....	2,712,186
1891.....	1,206,918	1904.....	2,389,557
1892.....	1,594,205		
		Duty.	
1905	{ Tin crystals.....	Free.	\$ 2,064
	{ Tin in blocks, pigs and bars.....	"	819,038
	{ Tin plates and sheets.....	"	1,751,507
	{ Tin foil.....	"	62,813
		Tinware, plain, japanned, or lithographed and all manufactures of tin, N.E.S.....	25 % 156,335
Total			82,791,757

NON METALLIC.

ABRASIVE MATERIALS.

Included under this heading, there are produced in Canada, corundum, the various sandstone abrasives, such as grindstones, pulpstones, whetstones, etc., and tripolite or infusorial earth.

Corundum.—The total shipments of grain corundum in 1905 from mills in Canada, was 1,644 tons, valued at \$149,153 f.o.b. at railway shipping points. Compared with the shipments in 1904 there is an increase of 651 tons or over 65 per cent.

Detailed statistics of output and sales for 1905 were as follows:

Rock treated	23,570 tons
Grain corundum graded	3,361,838 pounds

Shipments—

Grain corundum sold in Canada	280,050 pounds
Grain corundum sold in other countries	3,008,217 "
Total sales	3,288,717 pounds

Two companies were mining corundum rock and operating mills during the year. The Canada Corundum Company, Ltd., Toronto, the largest operator, worked the Craig mine at Craigmont, Renfrew county, but the mill was shut down a good part of the year, while making changes. There were 190 men employed during the year. The Ashland Emery and Corundum Company have taken over the mills and chattels of the Ontario Corundum Company. The property is located at Burgess Mines, P. O., Hastings county, Ont., and 20 men were employed for about half the year. The Corundum Refineries Ltd., were opening up a property at Jewelville, Ont., but were not in a position to produce during the year.

Statistics of shipments since 1900, are as follows :—

	Quantity.	Value.
1900 grain corundum	3 tons.	\$ 300
1901 "	387 "	46,415
1902 "	768 "	84,465
1903 " 703 ¹	970 "	80,180
corundum ore 267 ¹		
1904 grain corundum	993 "	109,545
1905 "	1644 "	149,153

Statistics since 1900 showing the quantities of ore treated, the corundum produced, and the sales or shipments, are given in the following tables.

TABLE NO. 1.
 ABRASIVE MATERIALS.
 PRODUCTION OF CORUNDUM ORE AND CORUNDUM.

Calendar Year.	Corundum bearing rock treated.	Grain Corundum Graded	Grain Corundum Sold in Canada.	Grain Corundum Exported.	Total of Sales of Grain Corundum.
	Tons.	Tons.	Tons.	Tons.	Tons.
1900.....		60			3
1901.....	4,134	434	85	302	387
1902.....	7,996	805	106	662	768
1903.....	(a) 8,877	839	85	618	703
1904.....	28,187	1,654	116	877	993
1905.....	23,570	1,680	140	1,504	1,644

(a) In addition to this amount which was milled in Canada, 267 tons of ore were mined and shipped to the United States for treatment there.

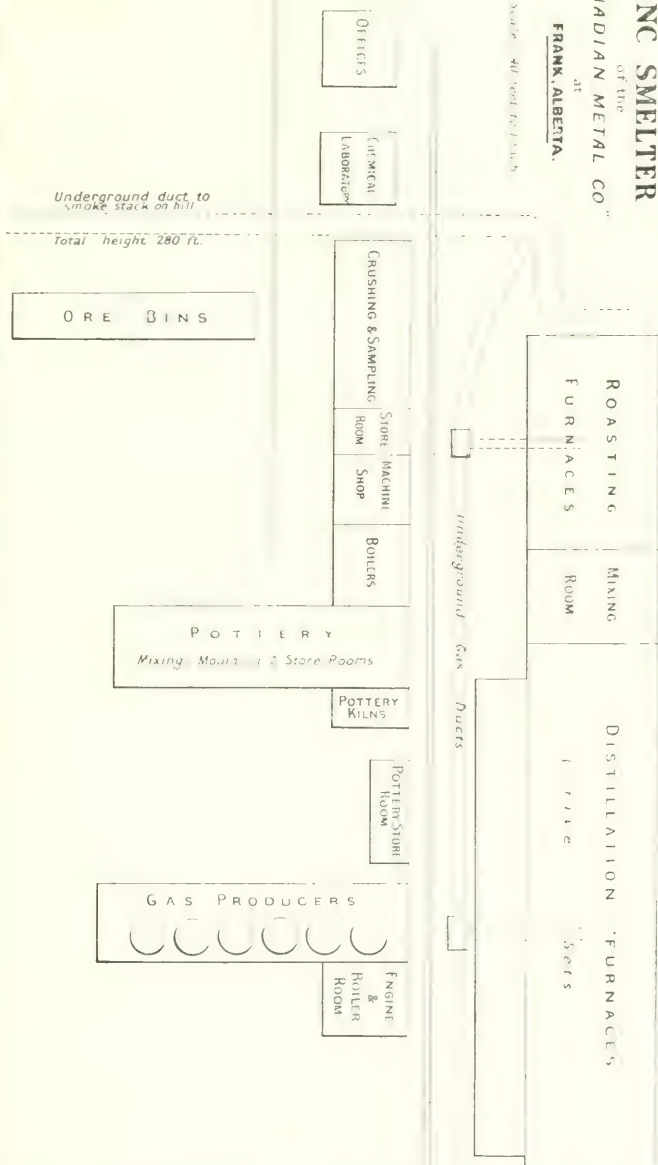
Grindstones, Pulpstones, etc.—The production of grindstones, including wood-pulp stones, etc., in 1905, from quarries in Nova Scotia and New Brunswick, reached a total of 5,540 tons, valued \$62,375, showing an increase over the production in 1904 of 891 tons or over 19 per cent., and although it is the largest production reached since 1888, there has been comparatively little variation in the yearly output for the past 20 years.

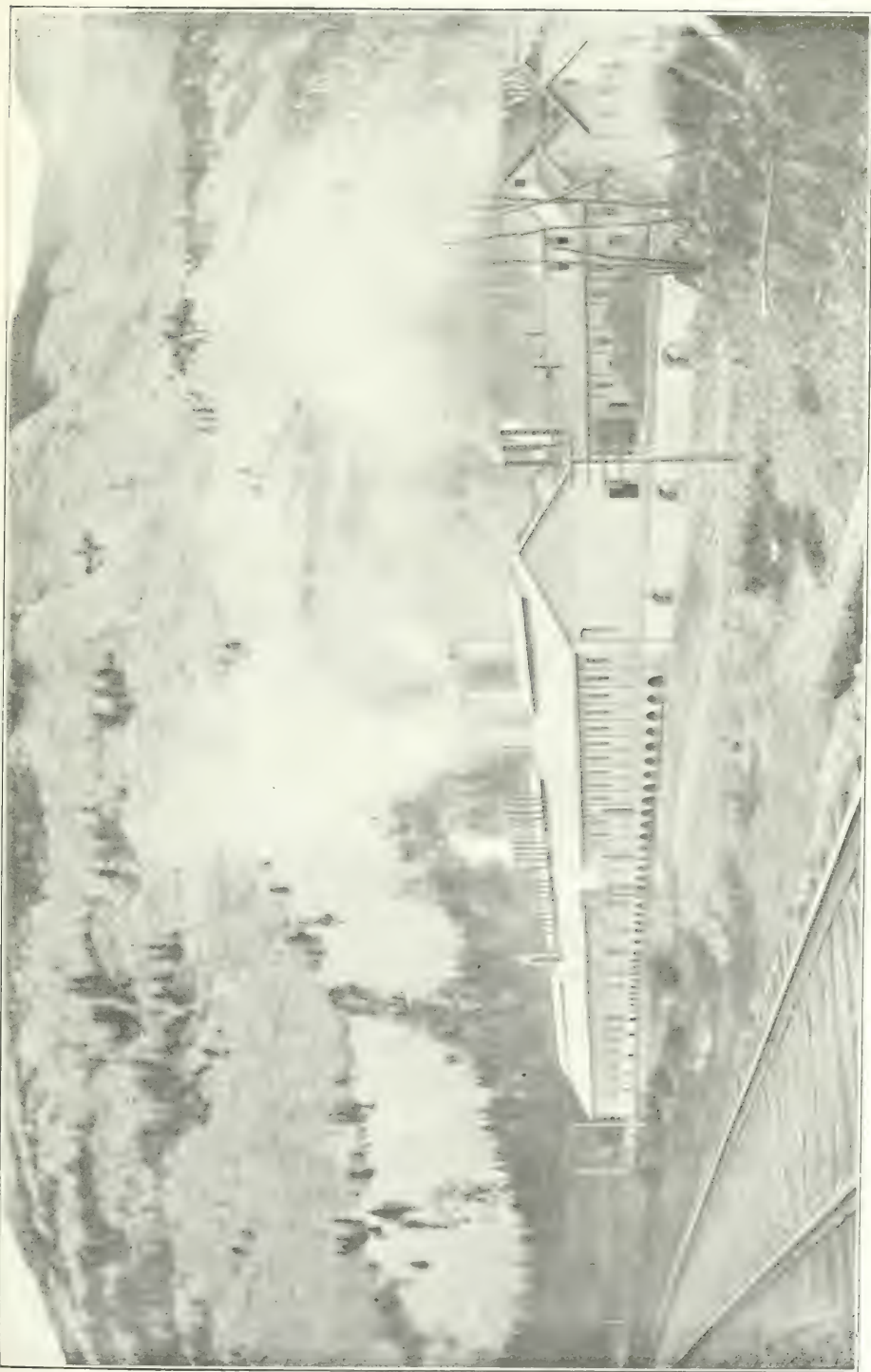
These abrasives are quarried from the Millstone Grit of the Carboniferous formation which occupies a large portion of the surface of the eastern half of the province of New Brunswick and the northern and north western parts of Nova Scotia.

The grindstones are all shipped in a finished condition and are worth from \$10 to \$12 per ton. Pulp stones are sold at about \$75 per stone, the weight of the stones being about $2\frac{3}{4}$ tons. The production of them in 1905 was about 25 stones, which found a market in Canadian and United States pulp mills. Scythe or whetstones are manufactured by one firm. These are put up in one quarter gross boxes, thirty pounds to the box, and are worth about \$50 per ton. About 200 gross were made in 1905. At some of the quarries there is a considerable production of foundation and building stone, besides rough stones for breakwater and harbour works.

Plan
of the
ZINC SMELTER
of the
"CANADIAN METAL CO."
at
FRANK, ALBERTA.

Scale 40 feet to 1 inch





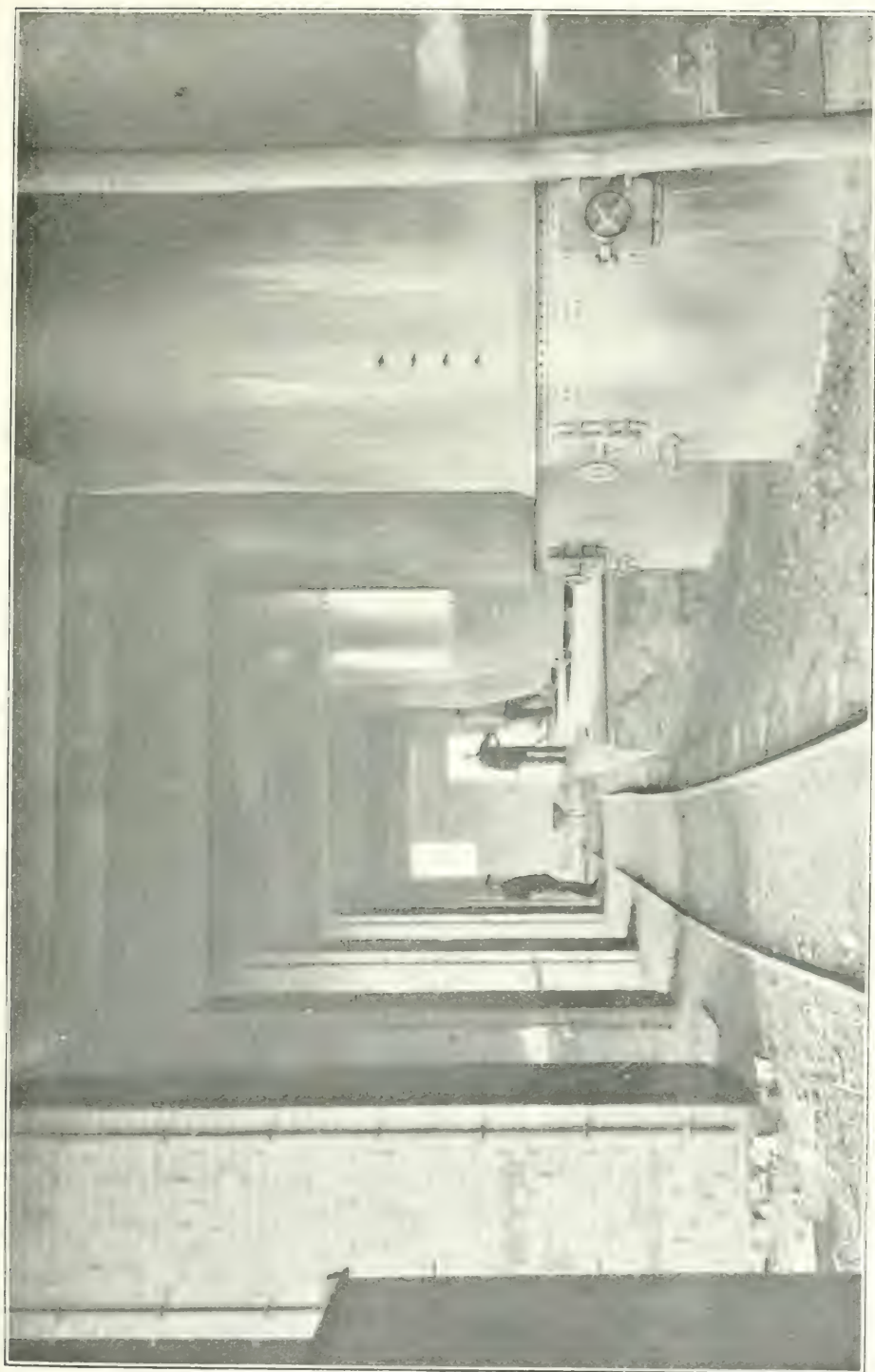
THE CANADIAN METAL CO., (LIMITED.) ZINC SMELTER, FRANK, ALTA.



JOHNSON & CO. CO. - TOWN, VIRGINIA - DISTILLATION COLUMN



THE CANADIAN METAL CO., (LIMITED).—ZINC SMELTER.—POTTERY.



CANADIAN METAL CO. GAS PRODUCTS

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Statistics of the production by provinces since 1886, are given in table 2 below :—

TABLE 2.
 ABRASIVE MATERIALS.
 ANNUAL PRODUCTION OF GRINDSTONES.

CALENDAR YEAR.	NOVA SCOTIA.		NEW BRUNSWICK.		TOTAL.		AVERAGE VALUE PER TON.
	Tons.	Value.	Tons.	Value.	Tons.	Value.	
1886.....	1,765	\$24,050	2,255	\$22,495	4,020	\$46,545	\$11 58
1887.....	1,710	25,020	3,582	38,988	5,292	64,008	12 10
1888.....	1,971	20,400	3,793	30,729	5,764	51,129	8 87
1889.....	712	7,128	2,692	23,735	3,404	30,863	9 07
1890.....	850	8,536	4,034	33,804	4,884	42,340	8 67
1891.....	1,980	19,800	2,499	22,787	4,479	42,587	9 51
1892.....	2,462	27,610	2,821	23,577	5,283	51,187	9 69
1893.....	2,112	21,000	2,488	17,379	4,600	38,379	8 34
1894.....	2,128	16,000	1,629	16,717	3,757	32,717	8 71
1895.....	1,400	14,000	2,075	17,932	3,475	31,932	9 19
1896.....	1,450	14,500	2,263	18,810	3,713	33,310	8 97
1897.....	1,407	17,500	3,165	24,840	4,572	42,340	9 26
1898.....	1,422	12,350	3,513	32,425	4,935	44,775	9 07
1899.....	1,378	10,300	3,133	32,965	4,511	43,265	9 59
1900.....	1,411	12,600	4,128	40,850	5,539	53,450	9 65
1901.....	358	3,200	4,223	42,490	4,581	45,690	9 97
1902.....	1,074	8,118	3,559	36,000	4,633	44,118	9 52
1903.....	1,337	9,562	4,201	38,740	5,538	48,302	8 72
1904.....	1,029	7,332	3,620	35,450	4,649	42,782	9 20
1905.....	1,020	10,200	4,520	52,175	5,540	62,375	11 25

The imports of grindstones into Canada, principally into the provinces of Ontario and Quebec, reached a total value in 1905, of \$49,747, made up of grindstones not mounted and not less than three feet in diameter to the value of \$40,869 and other grindstones to the value of \$8,878.

Statistics of the exports of grindstones and of the imports of grindstones, burrstones, emery and pumice stone, are shown in tables 3, 4, 5, 6 and 7, following:—

TABLE 3.
ABRASIVE MATERIALS.
EXPORTS OF GRINDSTONES.

Calendar Year.	Value.
1884	\$28,186
1885	22,606
1886	24,185
1887	28,769
1888	28,176
1889	29,982
1890	18,564
1891	28,433
1892	23,567
1893	21,672
1894	12,579
1895	16,723
1896	19,139
1897	18,807
1898*	25,588
1899 ²	23,288
1900 ²	42,128
1901 ²	29,130
1902 ²	24,489
1903 ²	27,659
1904 ²	35,612
1905 ²	24,868

* Including stone for the manufacture of grindstones.

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TABLE 4.
ABRASIVE MATERIALS.
IMPORTS OF GRINDSTONES.

Fiscal Year.	Duty.	Tons.	Value.
1880.....		1,044	\$11,714
1881.....		1,359	16,895
1882.....		2,098	30,654
1883.....		2,108	31,456
1884.....		2,074	30,471
1885.....		1,148	16,065
1886.....		964	12,803
1887.....		1,309	14,815
1888.....		1,721	18,263
1889.....		2,116	25,564
1890.....		1,567	20,569
1891.....		1,381	16,991
1892.....		1,484	19,761
1893.....		1,682	20,987
1894.....		1,918	24,426
1895.....		1,770	22,834
1896.....		1,862	26,561
1897.....		1,521	25,547
1898.....			22,217
1899.....			27,476
1900.....			34,382
1901.....			39,068
1902.....			40,838
1903.....			53,388
1904.....			46,039
1905 {	Grindstones not mounted and not less than 36 inches in diameter.....		15 p.c. 40,869
	Grindstones N.E.S.....		25 p.c. 8,878
			49,747

TABLE 5.
ABRASIVE MATERIALS.
IMPORTS OF BURRSTONES.

Fiscal Year.	Value.	Fiscal Year.	Value.
1880.....	\$12,049	1893.....	\$ 3,552
1881.....	6,337	1894.....	3,029
1882.....	15,143	1895.....	2,172
1883.....	13,242	1896.....	2,049
1884.....	5,365	1897.....	1,827
1885.....	4,517	1898.....	1,813
1886.....	4,062	1899.....	1,759
1887.....	3,545	1900.....	1,546
1888.....	4,753	1901.....	5,762
1889.....	5,465	1902.....	2,559
1890.....	2,506	1903.....	586
1891.....	2,089	1904.....	35
1892.....	1,464	1905.....	2,607

* Burrstones in blocks, rough or unmanufactured, not bound up or prepared for binding into mill-stones. Duty free.

TABLE 6.
 ABRASIVE MATERIALS.
 IMPORTS OF EMERY.

Fiscal Year.	Emery. <i>a.</i>	Mfrs. of Emery. <i>b.</i>
1885.....	\$ 5,066	\$ 4,920
1886.....	11,877	5,832
1887.....	12,023	4,598
1888.....	15,674	4,001
1889.....	13,565	3,948
1890.....	16,922	5,313
1891.....	16,179	6,665
1892.....	17,782	6,492
1893.....	17,762	5,606
1894.....	14,433	2,223
1895.....	14,569	7,775
1896.....	16,287	11,913
1897.....	16,318	11,231
1898.....	17,661	15,478
1899.....	21,454	22,343
1900.....	19,312	25,615
1901.....	16,311	22,190
1902.....	14,476	23,892
1903.....	18,058	22,177
1904.....	21,626	29,273
1905.....	21,980	33,250

a Emery in bulk, crushed or ground. Duty free.

b Emery wheels and manufactures of emery. Duty 25 p.c.

TABLE 7.
 ABRASIVE MATERIALS.
 IMPORTS OF PUMICE STONE.

Fiscal year.	Value.
1885.....	\$ 9,384
1886.....	2,777
1887.....	3,594
1888.....	2,890
1889.....	3,232
1890.....	3,003
1891.....	3,696
1892.....	3,282
1893.....	3,798
1894.....	4,160
1895.....	3,609
1896.....	3,721
1897.....	2,903
1898.....	3,829
1899.....	5,973
1900.....	5,604
1901.....	5,516
1902.....	7,254
1903.....	6,152
1904.....	6,537
*1905.....	8,447

* Pumice and pumice stone, ground or unground. Duty free.

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Tripolite.—Owing to the destruction by fire of the mill at Bass River, Nova Scotia, in October, 1905, after having run about two months only, the shipments of tripolite were comparatively small, amounting to only 200 tons, valued at \$3,600 at the mill. Practically nothing was done on the tripolite deposits at St. Anns bay, Cape Breton.

Statistics of production since 1896, are given in the following table :—

TABLE 8.
ABRASIVE MATERIALS.
PRODUCTION OF TRIPOLITE.

Calendar Year.	Tons.	Value.
		£
1896	664	9,960
1897	15	150
1898	1,017	16,660
1899	1,000	15,000
1900	336	1,950
1901	850	15,300
1902	1,052	16,470
1903	835	16,700
1904	320	6,400
1905	200	3,600

Grindstone Quarries.

NOVA SCOTIA.—In Nova Scotia at the present time, only two quarries are operated for stone for the manufacture of grindstones, one at Lower Cove about three miles above Joggins on the Bay of Fundy in Cumberland county, the other on Quarry Island, a mile and half across the harbour from West Merigomish in Pictou county.

Lower Cove.—The Lower Cove quarry is operated by the Atlantic Grindstone Coal and Railway Company, (Fred Huestis, manager). Located on the Bay of Fundy shore, the stone, a light gray in colour, was at first quarried at the water's edge, but the present point of operation is just a little to the east. The rock dips steeply to the south with a strike east and west. The quarry as now operated is down to a depth of 60 feet. A wire cable $2\frac{1}{2}$ inches in diameter and span of nearly 1,000 feet with travelling clutch and lifting capacity of about 20 tons, delivers the stone to tram cars which convey it to the gang saws of which there are six in operation. The plant is very complete and ample for a large output. Power is supplied by two Mumford boilers of 125 horse-power each, built by the Robb

Engineering Company of Amherst, operating through a 250 h.p. tandem cylinder compound engine built by the same firm.

In the quarry there are several ledges of very good stone; there is also a great deal of 'bull' and broken rock, so that quarrying has been somewhat expensive. Grindstones are being made in all sizes from 5 inches to 7 feet in diameter and varying in width from $\frac{3}{4}$ of an inch to 15 inches. About five different grits are met with. The coarser grits are used for grinding axes, &c., the medium for grinding scythes, hay knives, &c., and the finer grit or blue stone for cutlery. Preparations are being made to make scythestones, whetstones, oil stones, &c. Some of the waste not suitable for grindstones is trimmed to shape and sold for foundation stone. The larger grindstones measuring 14 inches in width by 7 feet in diameter weigh about $3\frac{1}{2}$ tons.

Shipments are made chiefly by boat to Portland and Providence for points throughout the New England States and west to Chicago. A small quantity of the smaller stones is shipped by rail from Joggins station, chiefly for local markets in Nova Scotia and New Brunswick.

Quarry Island—The grindstone quarry at Quarry Island, Pictou county, is operated by James Stevenson and Jas. W. Sutherland. It is situated a mile and a half across the harbour from West Merigomish, and about 12 or 13 miles from New Glasgow, and can be approached either by boat from West Merigomish or by driving direct from New Glasgow. On the south side of the island the rock ledges from which the stone is obtained dip away from the water's edge to the northeast or north and into the bank on which there is a very heavy and rising covering of clay of a height of 21 feet and upwards so that it is not profitable to follow the stone very far under the bank. For a distance of 400 feet or more along the shore stone has been taken out at at various places, operations having extended over a long period of time with a comparatively small annual output. The stone is got out by hand-drilling and blasting, is rough trimmed into shape by hand and turned on a lathe, and grindstones are made varying from 4 to 6 feet in diameter. Two derricks operated by steam power are used to raise stone from the main opening. When sufficient stone is accumulated, shipments are made by schooner to New England points, and occasionally car load lots are shipped from Merigomish, in which case the stone is scowed across the harbour and hauled a half mile up hill to Merigomish Station. Coal for use under the boiler has also to be scowed across the harbour. About 6 or 8 men were employed under Captain Stevenson during 1905.

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NEW BRUNSWICK.—Grindstone quarries were worked in the province of New Brunswick during 1905 at Clifton, Stonehaven and Grande Anse on the Bay of Chaleur in Gloucester county and at Woodpoint and Rockport on Chignecto Bay in Westmoreland county, while stone for grinding wood pulp was made at Wm. Hood and Sons quarry at Indiantown, on the Miramichi river, Northumberland county.

Three quarries were operated on the Bay of Chaleur during 1905, the most important being that at Stonehaven owned by Joseph Read & Co., in fact this and the quarries at Woodpoint owned by Henry Read of Sackville are the largest producing grindstone quarries at present worked. The quarries on the Bay of Chaleur are all on the shore about a mile from the line of the Caraquet and Gulf Shore Railway and from 20 to 30 miles from Bathurst on the Intercolonial Railway.

- The Stonehaven quarry was in charge of Mr. Gordon Read with Amos Como as foreman. The stone was formerly quarried at low water, and floated in under rafts at high tide, but at present a sea wall built of clay and stone and being constantly added to by the waste from the quarry protects a considerable area from which stone can be taken below sea level. The stone is taken out and rough trimmed mostly by hand, a great deal being done under a system of piece work. Two gangs of saws and 8 lathes are operated in the mill by a 62-h.p. engine, while an engine of 25-h.p. is used for operating three derricks and pumping the water from the quarry. Grindstones of all sizes are made up to 7 feet by 15 inches as well as the small scythe and whetstones. The annual output is now over 2,500 tons, valued at the quarry at from \$10 to \$12 per gross ton. Shipments are made to wholesale firms in Quebec and Montreal and to New Haven, Boston and other New England points. Freight rates to Montreal are about 16½ cents per hundred pounds and to New Haven, Conn., from \$3 to \$3.50 per gross ton.

About two miles to the west of Stonehaven, grindstones are being made by W. R. Knowles at Clifton. The sandstone is covered by about a depth of 32 feet of clay and shale and occurs at a height of about 70 feet above sea level. There is an available thickness of about 14 feet of stone suitable for grindstone making. Grindstones are made varying in size from 12 inches to 7 feet in diameter and shipments are made chiefly to New England points. Steam machinery is employed to operate a steam shovel for removing the over-burden of clay and shale and for running gang saws and lathes for cutting and finishing the stone. The annual output is from 300 to 400 tons. About 6 feet

below the freestone is found a small 6 inch seam of coal which has been mentioned in early geological reports, and at a further depth of 60 feet, a second 6 inch coal seam is found.

Between Clifton and Stonehaven is a quarry formerly worked by Lombard & Co. This quarry has, however, been abandoned for the present, and the company has opened a new quarry at Grande Anse about 10 miles further along the coast, where the usual machinery, gang saws and lathes, for finishing the stone is set up. This quarry is being worked by Messrs. McGill & Co., for Lombard & Co. of Boston. The sand-stone at Grande Anse was also being used in building a large catholic church at that place.

The grindstone quarries in Westmoreland county, owned by Henry C. Read of Sackville, are worked in much the same way as those on the Bay of Chaleur. The grindstones are largely quarried at Rockport and brought to Woodpoint to be finished on the lathes. The annual output is from 1,200 to 1,500 tons.

At Woodpoint a building stone quarry is also worked by the same operator and a large quantity of good sandstone has been removed and used in many important buildings throughout the country.

At Indiantown, in Northumberland county, Messrs. Wm. Hood & Son of Montreal, have been opening up and working a sandstone quarry. The stone of light gray or buff colour has found a ready market in Montreal and has already been used in some important buildings. Some of the courses of stone are found to be well adapted to the manufacture of woodpulp stones, and since 1899 these have been supplied to Canadian paper makers and are also being exported to the United States.

The stone is highly commended by the firms using them. In size they measure about 54 inches diameter by 27 inches face, and are worth about \$75 each in car load lots at the quarry.

ASBESTUS.

The variations in this industry during the past twenty-five years are illustrated by the figures in tables Nos. 1 and 2.

TABLE 1.

ASBESTUS.

PRODUCTION. 1896 TO 1905.

	Tons.	Value.	Average Value per ton.
1896—Asbestos	10,892	\$ 423,066	\$ 38.84
Asbestic	1,358	6,790	5.00
	12,250	\$ 429,856	\$ 35.09
1897—Asbestos	13,202	\$ 399,528	\$ 30.26
Asbestic	17,240	45,840	2.66
	30,442	\$ 445,368	\$ 14.63
1898—Asbestos	16,124	\$ 475,131	\$ 29.46
Asbestic	7,661	16,066	2.10
	23,785	\$ 491,197	\$ 20.65
1899—Asbestos	17,790	\$ 468,635	\$ 26.34
Asbestic	7,746	17,214	2.22
	25,536	\$ 485,849	\$ 19.03
1900—Asbestos	21,621	\$ 729,886	\$ 33.76
Asbestic	7,520	18,545	2.46
	29,141	\$ 748,431	\$ 25.68
1901—Asbestos	32,892	\$ 1,248,645	\$ 37.96
Asbestic	7,325	11,114	1.52
	40,217	\$ 1,259,759	\$ 31.32
1902—Asbestos	30,219	\$ 1,126,688	\$ 37.28
Asbestic	10,197	21,631	2.12
	40,416	\$ 1,148,319	\$ 28.41
1903—Asbestos	31,129	\$ 915,888	\$ 29.42
Asbestic	10,548	13,869	1.31
	41,677	\$ 929,757	\$ 22.31
1904—Asbestos	35,611	\$ 1,213,502	\$ 34.07
Asbestic	12,854	12,850	1.00
	48,465	\$ 1,226,352	\$ 25.30
1905—Asbestos	59,669	\$ 1,486,359	\$ 29.33
Asbestic	17,594	16,900	.96
	68,263	\$ 1,503,259	\$ 22.02

TABLE 2.

ASBESTUS.

PRODUCTION, ETC.—1880 TO 1895.

Calendar Year.	PRODUCTION.			Exports, Average value per ton.
	Tons (2,000 lbs.)	Value.	Average value per ton.	
		£	\$ cts.	£ cts.
1880.....	380	24,700	65.00	Exports taken as production.
1881.....	540	35,100	65.00	
1882.....	810	52,650	65.00	
1883.....	955	68,750	71.98	
1884.....	1,141	75,097	65.80	
1885.....	2,440	142,441	58.37	
1886.....	3,458	296,251	59.64	
1887.....	4,619	226,976	49.14	
1888.....	4,404	255,007	57.90	
1889.....	6,113	426,554	69.77	
1890.....	9,860	1,260,240	127.81	
1891.....	9,279	999,878	107.75	
1892.....	6,082	390,462	64.19	
1893.....	6,331	310,156	49.02	
1894.....	7,630	420,825	55.15	
1895.....	8,756	368,175	42.05	

TABLE 3.

ASBESTUS.

EXPORTS.

Calendar Year.	Tons.	Value,	Average value per ton.
1892.....	5,380	8373,103	\$69.35
1893.....	5,917	338,707	57.24
1894.....	7,987	477,837	59.82
1895.....	7,442	421,690	56.66
1896.....	11,842	567,967	47.96
1897.....	15,570	473,274	30.40
1898.....	15,346	494,012	32.19
1899.....	17,883	473,148	26.46
1900.....	16,993	693,105	39.61
1901.....	32,269	1,069,918	33.16
1902.....	31,074	995,071	32.02
1903.....	31,780	891,033	28.04
1904.....	37,272	1,160,887	31.14
1905.....	47,031	1,386,115	29.47

TABLE 4.

ASBESTUS.

IMPORTS.

Fiscal Year.	Value.	Fiscal year.	Value.
1885.	\$ 674	1895.	\$26,094
1886.	6,831	1896.	23,900
1887.	7,836	1897.	19,032
1888.	8,793	1898.	26,389
1889.	9,943	1899.	32,607
1890.	13,250	1900.	43,455
1891.	13,298	1901.	50,829
1892.	14,090	1902.	52,464
1893.	19,181	1903.	75,465
1894.	20,021	1904.	83,827
		1905.	116,836

* Asbestos in any form other than crude, and all manufactures of. Duty 25 p.c.

According to the returns received from operators there are three main grades of product, viz.: crude, mill stock and asbestic. The former represents the portions of clean fibre picked out by hand; the mill stock, as its name implies, represents a number of different products of the milling process, whilst the by-product, for which the name 'asbestic' has been adopted, consists of the residual serpentine sand, carrying a large proportion of very short fibre. This finds a sale for plastering and other uses, taking the place of the ordinary sand and hair, over which it has been claimed to have many advantages. The asbestos fibre is sold to manufacturers, who produce with it a great variety of finished articles, mill board, paper, woven goods, &c., for use where a fireproof and non-conducting material is called for.

The asbestos product of Canada comes altogether from one small district in the eastern townships of Quebec province. In this district are two chief centres, viz.: Thetford and Black Lake, both situated on the line of the Quebec Central Railway, which connects the town of Sherbrooke with Point Lévis, opposite the city of Quebec. Outside of the just-mentioned district the only largely producing mine is situated on another small serpentine area at Danville, about twenty miles in a westerly direction from the before mentioned.

These worked asbestos mines are situated on a range of extensive masses of olivine diabase rocks, which extend from the Vermont boundary in a northeasterly direction nearly to the extremity of the Gaspé peninsula. At places these rocks are considerably serpentinised, and where the asbestos occurs are completely changed into serpentine.

These serpentine areas are full of veins of chrysotile or fibrous serpentine, cutting the solid mass in every direction. The fibre lies at right angles to the walls of the little veinlets, which vary in transverse dimensions so that in quarrying fibre of all lengths up to one or two inches is obtained.

The quarrying is done with the aid of power drills and ordinary mining appliances for breaking and hoisting, and the fibre is separated by a combined process of hand sorting and crushing, with separation of the rock from the fibre by special machinery. In the Bulletin on Asbestos, issued by the Geological Survey in 1903, the following description of one of the mills will give a general idea of the method followed, with slight differences, by the operators.

The milling process is largely automatic throughout. After the rock suitable for hand cobbing is extracted, the bulk of the output is run to the mill by steam trams, and the rough material passes at once to a Blake crusher, generally of two dimensions, where it is sized for the rolls. In the King Bros' mills these are corrugated, and the rock from the crusher goes directly through the rolls, from which it passes to a series of cyclones that reduce the rock to powder and separate the contained fibre. Exhausts are provided by which the greater part of this is removed and the material from the cyclone passes on to a set of shaking screens of different sized mesh by which the fiberized material is separated ready for bagging. Boys are stationed at points to regulate the supply of the material along the conveying belts. The bottom of the mine holds a considerable amount of broken fibre, generally wet and dirty, and this before going through the mill is put through a drying cylinder set at an angle of about 5 degrees and revolving slowly, by which the moisture is readily extracted. At present the motive power in all the mills is steam.

While the general principle in all these mills is practically the same, scarcely two are built on precisely the same plan. In some, the rolls are discarded, and other points of difference are seen depending upon the conditions at different mines. The extraction of the fibre is successfully accomplished at all the mines, and a large amount of the rock output which formerly would have gone to the dump as waste material is now profitably utilized. At the present time, at Black Lake, with the exception of Mr. Johnston's new mine, and that of the American Asbestos Co., which is still in the development stage, the greater portion of the output in this district is sent to the mill and the production of crude asbestos which at one time formed an important part of the output at this place has in consequence largely fallen off.

COAL.

The production of coal for 1905 has easily retained its first place in the table showing the relative importance of the various Canadian mineral products. Fossil fuel in 1905 contributed nearly 26 per cent of the total mineral production of Canada. (See table, page 9.) Gold, which comes next in the list, contributed slightly over 21 per cent.

For the year ending December 31st 1905, Canada's coal production amounted to 8,667,948 short tons, valued at \$17,520,263, of which the detailed statistics are given in tables 1, 2 and 3.

TABLE 1.

COAL.

PRODUCTION BY PROVINCES, 1903, 1904 and 1905.

Province.	1903.		1904.		1905.	
	Tons.	Value.	Tons.	Value.	Tons.	Value.
		\$		\$		\$
Nova Scotia.....	5,653,338	10,095,246	5,596,241	9,993,288	5,646,583	10,083,184
British Columbia	1,676,581	4,490,844	1,862,625	4,989,174	1,945,452	5,211,030
North-west Territories including Yukon	614,445	1,316,743	786,617	1,591,545	1,046,513	2,167,249
New Brunswick.	16,000	40,000	9,112	18,224	29,400	58,800
Total	7,960,364	15,942,833	8,254,595	16,592,231	8,667,948	17,520,263

TABLE 2.

COAL.

PRODUCTION. COMPARISON OF 1904 AND 1905.

Province.	INCREASE OR DECREASE.			
	Tons.	Per cent.	Value. \$	Per cent.
Nova Scotia	<i>i</i> 50,342	<i>i</i> .89	<i>i</i> 89,896	<i>i</i> .89
British Columbia	<i>i</i> 82,827	<i>i</i> 4.45	<i>i</i> 221,856	<i>i</i> 4.45
North-west Territories including Yukon	<i>i</i> 259,896	<i>i</i> 33.04	<i>i</i> 575,704	<i>i</i> 36.17
New Brunswick.....	<i>i</i> 413,353	<i>i</i> 222.65	<i>i</i> 40,576	<i>i</i> 222.65
Dominion.....	<i>i</i> 413,353	<i>i</i> 5.01	<i>i</i> 928,032	<i>i</i> 5.59

i Increase. *d* Decrease.

TABLE 3.

COAL.

ANNUAL PRODUCTION SHOWING THE INCREASE OR DECREASE EACH YEAR

Calendar Year.	Tons.	Value.	Average Value per Ton	Increase (i) or Decrease (d) in Tonnage.	Incr. (i) or Decr. (d) per cent.
1886.....	2,116,653	83,739,840	\$1 77		
1887.....	2,429,330	4,388,206	1 81	<i>i</i> 312,677	<i>i</i> 14·8
1888.....	2,602,552	4,674,140	1 80	<i>i</i> 173,222	<i>i</i> 7·1
1889.....	2,658,303	4,894,287	1 84	<i>i</i> 55,751	<i>i</i> 2·1
1890.....	3,084,682	5,676,247	1 84	<i>i</i> 426,379	<i>i</i> 16·0
1891.....	3,577,749	7,019,425	1 96	<i>i</i> 493,067	<i>i</i> 16·0
1892.....	3,287,745	6,363,757	1 94	<i>d</i> 290,004	<i>d</i> 8·1
1893.....	3,783,499	7,359,080	1 95	<i>i</i> 495,754	<i>i</i> 15·1
1894.....	3,847,070	7,429,468	1 93	<i>i</i> 63,571	<i>i</i> 1·7
1895.....	3,478,344	6,739,153	1 94	<i>d</i> 368,727	9·6
1896.....	3,745,716	7,226,462	1 93	<i>i</i> 267,372	7·7
1897.....	3,786,107	7,303,597	1 93	<i>i</i> 40,391	<i>i</i> 1·1
1898.....	4,173,108	8,224,288	1 97	<i>i</i> 387,001	<i>i</i> 10·2
1899.....	4,925,051	10,283,497	2 09	<i>i</i> 751,943	<i>i</i> 18·0
1900.....	5,777,319	13,742,178	2 38	<i>i</i> 852,268	<i>i</i> 17·3
1901.....	6,486,325	12,699,243	1 96	<i>i</i> 709,006	<i>i</i> 12·3
1902.....	7,466,681	15,210,877	2 04	<i>i</i> 780,356	<i>i</i> 15·1
1903.....	7,960,364	15,942,833	2 06	<i>i</i> 493,683	<i>i</i> 6·6
1904.....	8,254,595	16,592,231	2 01	<i>i</i> 294,231	<i>i</i> 3·7
1905.....	8,667,948	17,520,263	2 02	<i>i</i> 413,353	<i>i</i> 5·0

The following short table is illustrative of the growth of the coal industry, in each of the provinces for some time back. It gives the proportion of the total production to be credited to each province at various periods since 1874.

Province.	1874.	1880.	1890.	1898.	1899.	1900.	1901.	1902.	1903.	1904.	1905.
	p. c.	p. c.	p. c.	p. c.	p. c.	p. c.	p. c.	p. c.	p. c.	p. c.	p. c.
Nova Scotia	91	79	71	61·6	64·2	62·9	64·4	69·4	71·3	68·0	65·5
New Bruns. & J.											
Saskatchewan											
Alberta											
and Yukon.	8	20	4	8·3	6·8	6·1	6·0	6·4	7·7	9·5	12·1
B. Columbia.			25	30·3	29·0	31·0	29·6	24·2	21·0	22·5	22·4

Table 2 shows a total increase for 1905 of 413,353 tons over 1904, which represents 5.01 per cent. All of the provinces contributed to this result, the production this year having in every case been greater than in 1904. Serious labour troubles closed some of the mines on Vancouver island for nearly four months during the year, but in spite of these circumstances even British Columbia shows an increase, which, however, is not as substantial as that of the previous year.

SESSIONAL PAPER No. 26a

The new provinces of Alberta and Saskatchewan have been advancing at a very rapid rate. The growing settlement of the country is of course responsible for a largely increased domestic consumption and this market will grow from year to year for a long time to come yet.

Nova Scotia has remained practically stationary since 1903. This year shows a slight increase, whereas last year a diminution had to be recorded as compared with the production for 1903.

In New Brunswick, the coal industry shows signs of great activity as compared with previous years. The production has increased from 9,000 tons in 1904 to over 29,000 tons; although the coal mining operations of this province are on a small scale owing to the thinness of the seams, yet the industry is important from the local standpoint. The quality of the coal is excellent.

The following tables give the statistics of imports and exports of coal.

TABLE 4.

COAL.

EXPORTS.

CALENDAR YEAR.	PRODUCE OF CANADA.	NET PRODUCE.	CALENDAR YEAR.	PRODUCE OF CANADA.	NET PRODUCE.
	Tons.	Tons.		Tons.	Tons.
1873.....	420,683	5,403	1890.....	724,486	82,534
1874.....	310,988	12,859	1891.....	971,259	77,827
1875.....	250,348	14,026	1892.....	823,733	93,988
1876.....	248,638	4,995	1893.....	960,312	102,827
1877.....	301,317	4,829	1894.....	1,103,694	89,786
1878.....	327,959	5,468	1895.....	1,011,235	96,836
1879.....	306,648	8,468	1896.....	1,106,661	116,774
1880.....	432,188	14,217	1897.....	986,130	101,848
1881.....	395,382	14,245	1898.....	1,150,029	99,189
1882.....	412,682	37,576	1899.....	1,293,169	101,004
1883.....	436,811	44,388	1900.....	1,787,777	62,776
1884.....	474,405	62,665	1901.....	1,573,661	53,894
1885.....	427,937	71,003	1902.....	2,090,268	23,453
1886.....	520,703	78,443	1903.....	1,954,629	27,138
1887.....	580,965	89,098	1904.....	1,557,412	27,308
1888.....	583,627	84,316	1905.....	1,635,287	86,792
1889.....	665,315	89,294			

TABLE 5.
COAL.
EXPORTS.—NOVA SCOTIA AND BRITISH COLUMBIA.

Calendar Year.	Nova Scotia.		*British Columbia.	
	Tons.	Value.	Tons.	Value.
1874.....	252,124	\$647,539	51,001	\$ 278,180
1875.....	179,626	404,351	65,842	356,018
1876.....	126,520	263,543	116,910	627,754
1877.....	173,389	352,453	118,252	590,263
1878.....	154,114	293,795	165,734	698,870
1879.....	113,742	203,407	186,094	608,845
1880.....	199,552	344,148	219,878	775,008
1881.....	193,081	311,721	187,791	622,965
1882.....	216,954	390,121	179,552	628,437
1883.....	192,795	336,088	271,214	946,271
1884.....	222,709	430,330	245,478	901,440
1885.....	176,287	349,650	250,191	1,000,764
1886.....	240,459	441,693	274,466	960,649
1887.....	207,941	390,738	356,657	1,262,552
1888.....	165,863	330,115	405,071	1,695,650
1889.....	186,608	396,830	470,683	1,918,263
1890.....	202,387	426,070	508,882	1,977,191
1891.....	194,867	417,816	767,734	2,958,695
1892.....	181,547	407,980	599,716	2,317,734
1893.....	203,198	470,695	708,228	2,693,747
1894.....	310,277	633,398	770,439	2,855,216
1895.....	241,091	534,479	728,283	2,692,562
1896.....	380,149	787,270	679,799	2,507,752
1897.....	307,128	642,754	630,341	2,221,737
1898.....	309,158	629,363	813,843	2,948,428
1899†.....	459,260	827,941	781,809	2,947,369

*See foot-note, table 16. †Since 1899, exports by provinces have not been published in Trade and Navigation Report.

TABLE 6.
COAL.
IMPORTS OF BITUMINOUS COAL.

Fiscal Year.	Tons.	Value.	Fiscal Year.	Tons.	Value.
1880.....	457,049	\$1,220,761	1893.....	1,603,154	3,967,764
1881.....	587,024	1,741,568	1894.....	1,359,509	3,315,094
1882.....	636,374	1,992,081	1895.....	1,444,928	3,321,387
1883.....	911,629	2,996,198	1896.....	1,538,489	3,299,025
1884.....	1,118,615	3,613,470	1897.....	1,543,476	3,254,217
1885.....	1,011,875	3,197,539	1898.....	1,684,024	3,179,595
1886.....	930,949	2,591,554	1899.....	2,171,358	3,691,946
1887.....	1,149,792	3,126,225	1900.....	2,439,764	4,310,964
1888.....	1,231,234	3,451,661	1901.....	2,516,392	4,956,025
1889.....	1,248,540	3,255,171	1902.....	3,047,392	5,712,058
1890.....	1,409,282	3,528,959	1903.....	3,511,412	7,776,717
1891.....	1,598,855	4,060,896	1904.....	4,053,900	9,108,208
1892.....	1,615,220	4,099,221	1905*.....	4,176,274	8,002,896

*Duty, 53c. per ton.

Million Tons

Table G.

COAL

PRODUCTION

A	Canada	Tons
A ²	Ditto	Value
B	New Scotia	Tons
C	New Brunswick and Northwest Territories	"
D	British Columbia	"
E	Exports The Produce of Canada	"

Million
Dollars



TABLE 7.

COAL.

IMPORTS OF ANTHRACITE COAL.

Fiscal Year.	Tons.	Value.	Fiscal Year.	Tons.	Value.
1880.....	516,729	\$1,509,960	1893.....	1,500,550	\$ 6,355,285
1881.....	572,092	2,325,937	1894.....	1,530,522	6,354,040
1882.....	638,273	2,666,356	1895.....	1,404,342	5,350,627
1883.....	754,891	3,344,936	1896.....	1,574,355	5,667,096
1884.....	868,000	3,831,283	1897.....	1,457,295	5,695,168
1885.....	910,324	3,909,844	1898.....	1,460,701	5,874,685
1886.....	995,425	4,028,050	1899.....	1,745,460	6,190,509
1887.....	1,100,165	4,423,062	1900.....	1,654,401	6,602,912
1888.....	+2,138,627	5,291,875	1901.....	1,933,283	7,923,950
1889.....	1,291,705	5,199,481	1902.....	1,652,451	7,021,939
1890.....	1,291,335	4,595,727	1903.....	1,456,713	7,028,664
1891.....	1,399,067	5,224,452	1904*.....	2,275,018	10,461,223
1892.....	1,479,106	5,640,346	1905.....	2,604,137	12,093,371

* Coal anthracite, and anthracite coal dust. Duty free.

† In Table 7, Imports of Anthracite Coal, a very considerable increase will be noticed in 1888 over 1887, an increase of over ninety-four per cent, the falling off again in 1889 being quite as remarkable. The average values per ton for the three years 1887, 1888 and 1889, were \$4.02, \$2.47 and \$4.03 respectively. Although a duty of fifty cents per ton on anthracite coal was removed May 13, 1887, it is hardly thought this would account for the changes indicated, and unless some error may possibly have crept into the Trade and Navigation Report, no explanation is available.

TABLE 8.

COAL.

IMPORTS OF COAL DUST.

Fiscal Year.	Tons.	Value.	Fiscal Year.	Tons.	Value.
1880.....	3,565	\$ 8,877	1893.....	109,585	\$ 44,474
1881.....	337	666	1894.....	117,573	49,510
1882.....	471	900	1895.....	181,318	52,221
1883.....	8,154	10,082	1896.....	210,386	53,742
1884.....	12,782	14,600	1897.....	225,562	59,609
1885.....	20,185	20,412	1898.....	229,445	45,556
1886.....	36,230	36,996	1899.....	276,547	44,717
1887.....	31,401	33,178	1900.....	339,174	98,349
1888.....	28,808	34,730	1901.....	414,432	275,559
1889.....	39,980	47,139	1902.....	489,548	264,550
1890.....	53,104	29,818	1903.....	559,893	420,317
1891.....	60,127	36,130	1904.....	608,041	544,123
1892.....	82,091	39,840	1905*.....	650,261	343,456

* Duty 20 p.c., not over 13c. per ton.

The imports of coal into Canada comprise bituminous and anthracite. The former is mainly to supply the industrial wants of the province of Ontario and Western Quebec, whereas the anthracite is almost exclusively used for domestic purposes. The Western provinces derive

their domestic supply from the Cascades coal field, on the eastern slope of the Rocky Mountains on the main line of the Canadian Pacific Railway, where a good anthracite is produced, and also from the Belly river field, the Crows Nest Pass branch of the same railway, which yields a soft coal, high in fixed carbon, greatly prized for domestic purposes.

The following calculations show that Canada has to import about one half of the coal it consumes, but if we take into consideration the quantities that are exported from British Columbia and Nova Scotia, the Canadian production of coal would fill approximately 60 per cent of the requirements of the Dominion.

CONSUMPTION OF COAL IN CANADA, 1905.

	Tons.	
Production, Table 3.....	8,667,948	
Exports of Canada, Table 4.....	1,635,287	
Home consumption of Canadian coal.....		7,032,661
Imports Tables 6, 7 and 8.....	7,430,672	
Exports net produce.....	86,792	
Canadian consumption of imported coal.....		7,343,880
Total consumption of coal in Canada.....		14,376,541

TABLE 9.

COAL.

CONSUMPTION OF COAL IN CANADA.

Calendar Year	Canadian.	Imported.	Total.	Percentage Canadian.	Percentage Imported.	Consump- tion per capita.
	Tons.	Tons.	Tons.			Tons.
1886.....	1,595,950	1,884,161	3,480,111	45.9	54.1	758
1887.....	1,848,365	2,192,260	4,040,625	45.7	54.3	871
1888.....	2,013,925	3,314,353	5,328,278	37.8	62.2	1 137
1889.....	1,992,988	2,490,931	4,483,919	44.4	55.6	946
1890.....	2,360,196	2,581,187	4,941,383	47.8	52.2	1 031
1891.....	2,606,490	2,980,222	5,586,712	46.7	53.3	1 153
1892.....	2,464,012	3,082,429	5,546,441	44.4	55.6	1 133
1893.....	2,823,187	3,110,462	5,933,649	47.6	52.4	1 198
1894.....	2,743,376	2,917,818	5,661,194	48.5	51.5	1 130
1895.....	2,467,109	2,933,752	5,400,861	45.7	54.3	1 066
1896.....	2,639,055	3,206,456	5,845,511	45.1	54.9	1 140
1897.....	2,799,977	3,124,485	5,924,462	47.3	52.7	1 143
1898.....	3,023,079	3,274,981	6,298,060	48.0	52.0	1 200
1899.....	3,631,882	4,092,361	7,724,243	47.0	53.0	1 454
1900.....	3,989,542	4,361,563	8,351,105	47.8	52.2	1 561
1901.....	4,912,664	4,810,213	9,722,877	50.5	49.5	1 810
1902.....	5,376,413	5,165,938	10,542,351	51.0	49.0	1 927
1903.....	6,005,735	5,491,870	11,507,605	52.2	47.8	2 055
1904.....	6,697,183	6,909,651	13,606,834	49.2	50.8	2 346
1905.....	7,032,661	7,343,880	14,376,541	48.9	51.1	2 396

We give below the main features of the year's development of the coal mining industry by provinces.

SESSIONAL PAPER No. 26a

Nova Scotia.—In Cape Breton county seven of the collieries of the Dominion Coal Company shipped continuously. The eighth colliery, which is the new mine, Dominion No. 6, started to ship in June. This No. 6 is situated on the point of land formed by Big Glace Bay on the one side and Schooner Pond on the other. Two double slopes have been driven on the Phalen seam, one pair being called the East Slope and the other the West Slope. The two pairs are not parallel but converge towards the outcrop, the angle between them being somewhat over 70 degrees. The mouths of the slopes are sufficiently near to one another to be worked by one bank head which will be of steel, while the surface plant will be modern and up to date.

Another feature of the year in the Dominion Coal Company's field is the extensive submarine development, which has been undertaken with the view of extending the workings as far as possible under the sea. The mine chosen for this experiment is the Hub, or Dominion No. 7. The main level in November, 1905, was in 4600 feet from the shaft, or over 3000 feet under the water from high water mark. It is intended to ultimately extract 2000 tons a day from this submarine area in this mine. It might be of interest to mention that the old names of some of the collieries have been discarded by the company and the mines are now officially designated by numbers as follows:—

OLD NAMES.	NEW DESIGNATION.
Dominion No. 1.	Dominion No. 1.
Dominion No. 2 (Phalen Seam)	Dominion No. 2.
Dominion No. 4.	Dominion No. 3.
Caledonia Colliery.	Dominion No. 4.
Reserve Colliery.	Dominion No. 5.
New Mine.	Dominion No. 6.
Hub Colliery.	Dominion No. 7.
International.	Dominion No. 8.
Dominion No. 9 (Harbour Seam)	Dominion No. 9.

TABLE 10.
COAL.
NOVA SCOTIA : OUTPUT, SALES, COLLIERY CONSUMPTION, AND PRODUCTION.

Calendar Year.	Output, Tons, 2,240 lbs.	Sales, Tons, 2,240 lbs.	Colliery Consumption, Tons, 2,240 lbs.	Production, Tons, 2,240 lbs.	Output, Tons, 2,000 lbs.	Sales, Tons, 2,000 lbs.	Colliery Consumption, Tons, 2,000 lbs.	Production, Tons, 2,000 lbs.	Price per Ton, 2,240 lbs.	Value of production.
1872	880,950	782,914	110,341	806,255	986,664	880,224	123,582	1,003,806	1 75	\$1,508,446
1873	1,031,467	881,106	108,338	983,504	1,177,643	986,839	121,406	1,108,245	1 75	1,731,632
1874	872,720	749,127	119,582	868,709	977,446	839,022	133,902	972,954	1 75	1,529,240
1875	781,165	706,735	124,110	880,905	874,305	791,610	139,003	930,613	1 75	1,454,084
1876	709,646	634,207	113,788	747,905	794,804	710,312	127,443	837,735	1 75	1,308,991
1877	737,496	687,065	98,841	785,906	848,396	769,513	110,702	880,245	1 75	1,375,739
1878	770,603	693,511	88,627	782,138	863,075	776,732	99,202	875,994	1 75	1,308,741
1879	788,271	688,624	84,787	773,411	882,863	771,259	94,961	866,220	1 75	1,353,469
1880	1,032,710	934,659	96,831	1,063,490	1,156,635	1,069,218	108,451	1,177,669	1 75	1,840,108
1881	1,124,270	1,035,014	107,888	1,142,902	1,259,183	1,159,216	120,834	1,280,050	1 75	2,000,079
1882	1,365,811	1,250,179	111,381	1,361,560	1,529,708	1,400,200	124,747	1,524,947	1 75	2,382,730
1883	1,422,553	1,297,523	111,949	1,409,472	1,593,259	1,453,226	125,383	1,578,609	1 75	2,466,576
1884	1,389,295	1,261,650	116,769	1,378,419	1,556,011	1,413,048	136,781	1,643,829	1 75	2,412,233
1885	1,332,205	1,254,510	127,624	1,382,134	1,514,470	1,405,051	134,939	1,547,990	1 75	2,418,735
1886	1,502,611	1,373,666	142,421	1,516,087	1,682,924	1,538,506	159,512	1,698,018	1 75	2,633,152
1887	1,670,830	1,519,684	139,777	1,659,461	1,871,330	1,702,046	156,550	1,858,536	1 75	2,904,057
1888	1,776,128	1,576,692	157,431	1,734,135	1,989,263	1,765,895	176,336	1,942,231	1 75	3,034,735
1889	1,736,279	1,555,107	158,131	1,713,238	1,967,632	1,741,730	177,107	1,918,827	1 75	2,998,167
1890	1,984,001	1,786,111	161,240	1,947,351	2,222,081	2,000,414	180,589	2,181,033	1 75	3,407,864
1891	2,044,784	1,849,945	174,983	2,024,928	2,290,158	2,071,938	195,981	2,267,919	1 75	3,543,624
1892	1,942,780	1,752,934	175,092	1,928,026	2,175,913	1,963,286	196,103	2,159,389	1 75	3,374,046
1893	2,223,042	1,977,543	205,425	2,182,968	2,489,807	2,214,848	280,076	2,444,924	1 75	3,820,194
1894	2,250,631	2,060,920	196,206	2,257,126	2,520,707	2,308,231	219,751	2,527,982	1 75	3,949,970
1895	1,999,756	1,793,698	193,639	1,986,737	2,239,727	2,008,270	216,875	2,223,145	1 75	3,476,790
1896	2,292,675	2,046,828	192,975	2,239,803	2,567,736	2,290,432	216,132	2,508,579	1 75	3,919,655
1897	2,340,631	2,044,672	181,716	2,226,388	2,620,835	2,290,032	293,522	2,493,554	1 75	3,896,179
1898	2,262,656	2,121,126	167,428	2,288,554	2,534,175	2,375,661	187,519	2,563,180	1 75	4,004,970
1899	2,865,443	2,333,989	177,460	2,811,449	3,209,290	2,950,067	198,735	3,148,822	2 00	5,622,898
1900	3,298,791	2,998,737	236,563	3,235,300	3,691,646	3,358,585	261,951	3,623,536	2 50	8,088,250
1901	3,221,633	3,411,127	301,454	3,712,561	4,273,357	3,820,462	357,606	4,158,068	1 75	6,476,982
1902	4,725,480	4,229,120	379,198	4,608,318	5,292,338	4,736,614	473,672	5,161,316	2 00	9,216,636
1903	5,215,562	4,505,720	481,903	5,047,623	5,841,429	5,113,007	539,731	5,653,338	2 00	10,065,246
1904	5,131,985	4,551,740	444,904	4,996,614	5,747,823	5,097,949	498,292	5,396,241	2 00	9,993,288
1905	5,197,877	4,613,818	427,774	5,041,592	5,821,622	5,167,476	479,107	5,616,883	2 00	10,083,184

* This Production is obtained by adding Sales and Colliery Consumption. For sales previous to 1872, see report of the Department of Mines, Nova Scotia, 1883, page 68.

TABLE II.

COAL.

NOVA SCOTIA : COAL TRADE BY COUNTIES.

CALENDAR YEAR.	CUMBERLAND.		PICTOU.		CAPE BRETON.		OTHER COUNTIES.	
	Raised.	Sold.	Raised.	Sold.	Raised.	Sold.	Raised.	Sold.
	Tons, 2,000 lbs.	Tons, 2,000 lbs.	Tons, 2,000 lbs.	Tons, 2,000 lbs.	Tons, 2,000 lbs.	Tons, 2,000 lbs.	Tons, 2,000 lbs.	Tons, 2,000 lbs.
1st quarter.....	131,564	103,656	143,611	111,182	680,523	513,023	31,254	19,872
2nd "	188,454	161,334	174,398	140,971	1,130,453	983,808	55,849	40,925
3rd "	175,151	150,812	164,965	146,779	1,200,703	1,296,063	63,966	47,797
4th "	197,834	173,262	185,280	162,065	1,231,291	1,065,747	59,629	44,330
Total, 1905	693,500	585,064	668,454	560,937	4,248,970	3,858,641	210,698	152,834
" 1904	731,316	621,169	716,928	622,358	3,973,433	3,613,169	332,146	241,253

TABLE 12.

COAL.

NOVA SCOTIA:—OUTPUT BY COLLIERIES DURING THE CALENDAR YEAR 1905.

Colliery.	Tons, 2,000 lbs.	Colliery.	Tons, 2,000 lbs.
<i>Cumberland County.</i>		<i>Inverness County.</i>	
Chignecto.....	42,641	Mabou.....	3,549
Joggins.....	59,957	Port Hood.....	16,635
Minudie.....	37,860	Inverness.....	187,789
Scotia.....	3,254	<i>Victoria County.</i>	
Springhill.....	534,116	New Cambellton.....	3,224
Strathcona.....	10,345	<i>Cape Breton County.</i>	
Prospect.....	5,328	Sydney Coal Co.....	4,316
<i>Pictou County.</i>		Dominion Coal Co.....	3,572,416
Acadia.....	358,590	N. Scotia Steel & Coal Co.....	625,303
Nova Scotia Steel and Coal	43,614	Gowrie and Blockhouse	
Co.....		collieries.....	46,935
Intercolonial.....	266,240	Total.....	5,821,622

The following table shows the markets to which the Nova Scotia coal finds its way. Outside of the province itself the main outlets are the Province of Quebec and the exports to the United States.

TABLE 13.

COAL.

NOVA SCOTIA:—DISTRIBUTION OF COAL SOLD.

Markets.	Calendar Years.					
	1902.		1903.		1904	
	Tons, 2,000 lbs.	Per cent.	Tons, 2,000 lbs.	Per cent.	Tons, 2,000 lbs.	Per cent.
Nova Scotia, transported by land.....	727,122	14·2	918,822	18·0	1,145,255	27·4
Nova Scotia, transported by sea.....	977,756	19·1	724,289	14·2	485,574	9·4
Total, Nova Scotia...	1,704,878	33·3	1,643,111	32·2	1,900,829	36·8
New Brunswick.....	435,537	8·5	474,053	9·3	477,360	9·2
Prince Edward Island.....	88,649	1·7	95,177	1·9	85,099	1·7
Quebec.....	1,609,205	31·5	1,916,384	37·6	1,721,751	33·3
Newfoundland.....	155,751	3·1	155,794	3·1	165,117	3·2
United States.....	1,009,420	19·7	730,658	14·3	755,433	14·6
West Indies.....					2,827	·1
Other countries.....	110,167	2·2	82,772	1·6	59,060	1·1
Total.....	5,113,607	100·0	5,097,949	100·0	5,167,476	100·0

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The Cape Breton Coal, Iron and Railway Company have been developing their property situated between Loon Lake and Cochran Lake, about twelve miles south-west of Glace Bay. Two slopes have been driven, one of which is now 700 feet and the other 400 feet in length. A third slope was driven upwards from the bottom of the 700 feet slope and parallel to it. The coal seam measured at the face at the bottom of the 700 foot slope, is 62 inches, but it is said to average nearly 6 feet. The Company are contemplating the erection of an up to date plant and are at present doing very extensive work on the surface, laying out a town site, constructing wide streets, etc. The mine is connected with the Sydney and Louisburg Railway, by a branch some two miles and a half long.

At Sydney Mines the collieries of the Nova Scotia Steel and Coal Company were operated ; No. 1 colliery during part of the year and No. 3 during all the year. In July all the work was concentrated on No. 3, but No. 1 was, temporarily at least, closed down.

In Inverness county no very noteworthy new developments have taken place during last year. A bore-hole nearly 650 feet deep, has been put down in 1904 at St. Rose, near Chimney-Corner and it was expected that development work would follow, but all work has been discontinued for the present.

In Pictou county the Acadia Coal Company was pushing very actively the sinking of the Allan shaft, in the hope of reaching the main seam. The intention is to make this the main colliery of the company. It is reported that the seam was struck in October, at a depth of almost 1000 feet. It is the intention to extend the shaft to cut all the seams.

New Brunswick.—In New Brunswick, the Grand Lake district was producing as usual during the year. The railway line of the New Brunswick Coal and Railway Company, which taps the coal district, has just passed under the control of the Provincial Government, and it is expected that much will be done to encourage the coal industry of the Grand Lake district.

TABLE 14.

COAL.

NEW BRUNSWICK :—PRODUCTION.

Calendar Year.	Tons.	Value.	Value per ton.
1887.....	10,040	\$ 23,607	\$2 35
1888.....	5,730	11,050	1 93
1889.....	5,673	11,733	2 07
1890.....	7,110	13,850	1 95
1891.....	5,422	11,030	2 03
1892.....	6,768	9,375	1 39
1893.....	6,200	9,837	1 59
1894.....	6,469	10,264	1 59
1895.....	9,500	14,250	1 50
1896.....	7,500	11,250	1 50
1897.....	6,000	9,000	1 50
1898.....	6,160	9,240	1 50
1899.....	10,528	15,792	1 50
1900.....	10,000	15,000	1 50
1901.....	17,630	51,857	2 94
1902.....	18,795	39,680	2 11
1903.....	16,000	40,000	2 50
1904.....	9,112	18,224	2 00
1905.....	29,400	58,800	2 00

Saskatchewan and Alberta.—In the Estevan district, in the south-east corner of the province of Saskatchewan, the Souris Coal Mining Company has built a new tippie 140 feet long, 35 feet high, near Coalfields. When the equipment is completed it is expected that the tippie will handle 1,000 tons per day of 10 hours. The company has laid out the town site of Taylortown in the vicinity of the mine. This company is also operating, under lease, the C.P.R. colliery at Bienfait, about three miles north-east of Coalfields. The Hudson Bay Company is boring extensively in the vicinity on its own land, but the logs of these boreholes are not available.

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Along the Crow's Nest line of the C.P.R., in Southern Alberta, there has been great activity in coal mining during the past year. Several new collieries have been opened and new coal areas are being developed. In the following brief mention of these, a geographical order will be observed from east to west along the Crow's Nest line.

At Taber, which is 32 miles east of Lethbridge, several coal mining companies are now operating, although the work done so far has been almost altogether of the nature of development. The two largest mines are those of the Taber Coal Mining Company, which controls 9,000 acres, and the Reliance Coal Company, with about 1,500 acres. There are other small mines which supply local wants. Eight analyses of this Taber coal gave the following range of composition: Moisture, 10 to 12 p.c.; volatile, combustible matter, 26 to 31 p.c.; fixed carbon, 46 to 51 p.c.; ash, 7 to 16 p.c.; specific gravity, 1.31 to 1.41 p.c.

In Lethbridge the Alberta Railway and Irrigation Company's mine has been producing very steadily. The workings are being extended to the neighbourhood of the valley of the Bow river, the bed of which is only about 40 feet above them and it is their intention to work out a large section underlying the valley. A very interesting piece of work is now being accomplished at the mine. The old workings, through which all the haulage and hoisting will be done, will be separated from the new underground section by a coal barrier of 200 feet, which will be pierced in only two places. These two tunnels will be lined with masonry and concrete and in each will be installed a system of sluice gates which can be worked from the surface, so that in case of an invasion of water from the Bow river, the old workings could be saved.

At Lundbreck, 39 miles west of McLeod, the Breckenridge and Lund Coal Company is doing a good deal of development work. They are sinking a shaft which was nearly 300 feet deep in September. The plant is at present solely for development but the permanent machinery is ordered and it is expected that the mine will be on a shipping footing before the close of the year.

At Frank, The Canadian American Coal and Coke Company was working the Gebo mine. The seam is here overhanging and is inclined at an angle of 82 degrees. It is worked up the pitch altogether.

The West Canadian Colliery Company has built a new tippie and screening plant at their No. 1 mine, about 4 miles north of Frank and 1 mile south of the old plant at Lille. All the coal is now taken out by the No. 1 tippie, and the screenings are sent to the coking plant at

Lille, where a washer was being built in September. This washer is designed for a capacity of 300 tons per 24 hours, and it is expected that washing the coal will greatly reduce the ash contents of the coke, which at present is rather high. The same company is operating the Bellevue Colliery, which is on the main line of the Crows Nest branch, about 3 miles east of Frank. The extreme work done here has been mainly with a view to development.

The International Coal and Coke Company at Coleman has worked steadily. The company has only been in operation two years, but it has a very up-to-date plant and an output of 900 tons a day. With little addition the plant could handle 1,500 tons.

On the main line of the C.P.R. the Pacific Coal Company has done a great deal of work during the year at their Bankhead colliery, near Banff, Alberta. The coal here is an anthracite admirably suited for domestic purposes. The company has just erected a breaker, a screening and loading plant which will at first handle 1,000 tons a day; this output could on short notice be increased to 2,000 tons. The plant which was not quite completed in September, besides the breaker and screening plant, comprised well equipped and extensive work-shops, power house, etc. When in working order the mine will produce all sizes of domestic coal, egg, stove, pea, etc., and the screenings will be briquetted.

At Canmore, four miles from Banff, the McNeil Coal Company has erected a new tipple and a picking plant; they are putting in a Howe washer to wash all coal under $\frac{1}{2}$ inch in size. The washing plant will have a capacity of 400 tons in ten hours, and is expected to be in running order before the end of the year.

At Anthracite the mine has been completely abandoned, for the present at least, and the greater part of the surface plant removed to the Canmore Colliery.

In the district around Edmonton, several small mines were worked, as in the past, from the banks of the Saskatchewan river. Preparations were being made for greatly increasing the output of several collieries, to keep pace with the demand created by the growth and development of the country.

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TABLE 15.

COAL.

NORTH-WEST TERRITORIES :—PRODUCTION.

Calendar Year.	Tons.	Value.	Value per ton.
1887.....	74,152	\$ 157,577	\$ 2 13
1888.....	115,124	183,354	1 59
1889.....	97,364	179,640	1 85
1890.....	128,953	198,498	1 54
1891.....	174,131	437,243	2 51
1892.....	184,370	469,930	2 55
1893.....	238,395	598,745	2 51
1894.....	199,991	488,980	2 45
1895.....	185,654	414,064	2 23
1896.....	225,868	606,891	2 69
1897.....	267,163	667,908	2 50
1898.....	340,088	825,220	2 43
1899.....	334,600	811,500	2 43
1900.....	351,950	839,375	2 38
1901.....	391,139	1,008,917	2 58
1902.....	478,129	1,110,521	2 32
1903.....	614,445	1,316,743	2 14
1904.....	786,617	1,591,545	2 02
1905.....	1,046,513	2,167,249	2 07

British Columbia.—In the Crow's Nest field, in British Columbia, the Crow's Nest Pass Coal Company is doing most of its work at Coal Creek and at Michel; there is comparatively little work done at Carbonado, on Morrissey Creek. At the Coal Creek colliery a new steel tippie, 724 feet long, and a screening plant are being erected to handle the coal from all the mines on both sides of the valley. The tippie is designed to handle an output of 4,000 tons in ten hours. At the Michel colliery, 24 miles north of Fernie, a new haulage system by compressed air locomotives is being put in. The tippie of the Michel colliery can handle 2,000 tons in ten hours.

In the Nanaimo district the Western Fuel Company are hoisting from No. 1 shaft at Nanaimo and from the Northfield or Departure shaft. At this last colliery they have just completed a modern tippie and vessel-loading plant. A strike which lasted from May to October, during which time the collieries were closed down, will rather lower the figure of production for the year.

The Wellington Colliery Company worked their extension colliery all the year. Dr. H. S. Poole has been charged by the Geological Survey to study the coal fields of Vancouver Island during the past summer, and in the Summary Report of the director will be found a short account of his investigations, both in the Nanaimo and in the Comox fields.

TABLE 16.

COAL.

BRITISH COLUMBIA :—PRODUCTION.

Calendar Year.	Output Tons, 2,240 lbs.	Home Consumption, Tons, 2,240 lbs.	Sold for Export, Tons, 2,240 lbs.	PRODUCTION.*		Price per ton, 2,240 lbs.	Value.
				Tons, 2,240 lbs.	Tons, 2,000 lbs.		
1836-52..	10,000				11,200	4 00	40,000
1852-59..	25,398				28,446	4 00	101,592
1859-71...	1,989				2,228	4 00	7,956
1860.....	14,247				15,957	4 00	56,988
1861.....	13,774				15,427	4 00	55,096
1862.....	18,118				20,292	4 00	72,472
1863.....	21,345	From 1836 to 1873 inclusive, the output is taken as production.			23,906	4 00	85,380
1864.....	28,632				32,068	4 00	114,528
1865.....	32,819				36,757	4 00	131,276
1866.....	25,115				28,129	4 00	100,460
1867.....	31,239				34,988	4 00	124,956
1868.....	44,005				49,286	4 00	176,020
1869.....	35,802				40,098	4 00	143,208
1870.....	29,843				33,424	4 00	119,372
1871-2-3.	148,459				166,274	4 00	593,836
1874.....	81,547	25,023	56,038	81,061	90,788	3 00	243,183
1875.....	110,145	31,252	66,392	97,644	109,361	3 00	292,932
1876.....	139,192	17,856	+122,329	140,185	157,007	3 00	420,555
1877.....	154,052	24,311	115,381	139,692	156,455	3 00	419,076
1878.....	170,846	26,166	164,682	190,848	213,750	3 00	572,544
1879.....	241,301	40,294	192,096	232,390	260,277	3 00	697,170
1880.....	267,595	46,513	225,849	272,362	305,045	3 00	817,086
1881.....	228,357	40,191	189,323	229,514	257,056	3 00	688,542
1882.....	282,139	56,161	232,411	288,572	323,201	3 00	865,716
1883.....	213,299	64,786	149,567	214,353	240,075	3 00	643,059
1884.....	394,070	87,388	306,478	393,866	441,130	3 00	1,181,598
1885.....	365,596	95,227	237,797	333,024	372,987	3 00	999,072
1886.....	320,636	85,987	249,205	335,192	375,415	3 00	1,005,576
1887.....	413,360	99,216	334,839	434,055	486,142	3 00	1,302,165
1888.....	489,301	115,953	365,714	481,667	539,467	3 00	1,445,001
1889.....	579,830	124,574	443,675	568,249	636,439	3 00	1,704,747
1890.....	678,140	177,075	508,270	685,345	767,586	3 00	2,056,035
1891.....	1,029,097	202,697	806,479	1,009,176	1,130,277	3 00	3,027,528
1892.....	826,335	196,223	640,579	836,802	937,218	3 00	2,510,406
1893.....	978,294	207,851	768,917	976,768	1,093,980	3 00	2,930,304
1894.....	1,012,953	165,776	827,642	993,418	1,112,628	3 00	2,980,254
1895.....	939,654	188,349	756,334	944,683	1,058,045	3 00	2,834,049
1896.....	894,882	261,984	634,238	896,222	1,003,769	3 00	2,688,666
1897.....	892,296	290,310	619,860	910,170	1,019,390	3 00	2,730,510
1898.....	1,136,485	375,423	752,863	1,128,286	1,263,680	3 00	3,384,858
1899.....	1,306,324	526,058	751,711	1,277,769	1,431,101	3 00	3,833,307
1900.....	1,590,178	685,667	914,184	1,599,851	1,791,833	3 00	4,799,553
1901.....	1,691,557	799,666	914,163	1,713,829	1,919,488	3 00	5,141,487
1902.....	1,641,626	837,871	776,809	1,614,680	1,808,441	3 00	4,844,040
1903.....	1,450,663	947,499	549,449	1,496,948	1,676,581	3 00	4,490,844
1904.....	1,685,698	1,129,465	533,593	1,663,058	1,862,625	3 00	4,989,174
1905.....	1,736,696	1,089,667	647,343	1,737,010	1,945,452	3 00	5,211,030

*This production is obtained by adding 'Home Consumption' and 'Sold for Export,' +52,935 of this amount was exported as sales without the division into the 'Home Consumption' and 'Sold for Export.'

†The figures in the 'Sold for Export' column do not agree as they should with those given in Table 5, the only explanation being that the data in the two cases are from different sources, and it has not been possible to find out the cause of the difference.

‡Two months only.

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SALES AND OUTPUT FOR YEAR. Tons of 2240 lbs.	Tons.		Cwt.	
Sold for consumption in Canada.....	513,313			
" export to U.S.A.....	647,343	.....		
" " to other countries.....				
Total sales.....			1,160,656	
Used in making coke.....	398,896	.....		
Used under colliery boilers, &c.....	177,458	.....		
Total for colliery use.....			576,354	
			1,737,010	
Stock on hand first of year.....	3,528			
" " last of year.....	3,214			
Difference taken from stock during the year.....			314	
Output of collieries for year.....			1,736,696	

NUMBER OF HANDS EMPLOYED, DAILY WAGES PAID, &c.

CHARACTER OF LABOUR.	UNDERGROUND.		ABOVE GROUND.		TOTAL.	
	No. of employees	Average daily wage	No. of employees	Average daily wage	No. of employees	Average daily wage
Supervision and clerical assistance.....	83	8 7 62	57	4 50	140	8 6 06
Whites—						
Miners.....	1,445	4 70			1,445	4 70
Miners' helpers.....	507	2 25			507	2 25
Labourers.....	624	2 75	368	2 60	992	2 67
Mechanics and skilled lab....	75	2 87	311	3 60	386	3 23
Boys.....	140	1 50	53	1 40	193	1 45
Japanese.....	102	1 37	18	1 22	120	1 24
Chinese.....	151	1 37	473	1 60	624	1 48
Totals.....	3,127		1,280		4,407	

COKE.

The total production of coke for 1905, to which contributed the three provinces of Nova Scotia, British Columbia and Alberta, shows a marked increase over 1904. From 554,083 tons in 1904 it attained 700,488 tons in 1905. Each of the three provinces have a larger production than in the previous year, but Nova Scotia and Alberta are mainly responsible for the greater tonnage.

TABLE 1.

COKE.

ANNUAL PRODUCTION.

Calendar Year.	Tons.	Value.	Value. per Ton.
1886.....	35,396	\$101,940	\$2.88
1887.....	40,428	135,951	3.36
1888.....	45,373	134,181	2.96
1889.....	54,539	155,043	2.84
1890.....	56,450	166,298	2.95
1891.....	57,084	175,592	3.08
1892.....	56,135	160,249	2.85
1893.....	61,078	161,790	2.65
1894.....	58,044	148,551	2.56
1895.....	53,356	143,047	2.68
1896.....	49,619	110,257	2.22
1897.....	60,686	176,457	2.91
1898.....	87,600	286,000	3.26
1899.....	100,820	350,022	3.47
1900.....	157,134	649,140	4.13
1901.....	365,531	1,228,225	3.36
1902.....	502,043	1,519,185	3.03
1903.....	561,318	1,734,404	3.09
1904.....	554,083	2,032,048	3.66
1905.....	700,488	2,436,211	3.48

The total increase in tonnage is therefore 146,405 over 1904, which is divided up as follows among the contributing provinces: Nova Scotia an increase of 110,439 tons, Alberta 23,882 tons and British Columbia 12,884 tons.

TABLE 2.
COKE.
PRODUCTION OF COKE BY PROVINCES.

Calendar Year.	Nova Scotia.		British Columbia.		Alberta.	
	Tons.	Value.	Tons.	Value.	Tons.	Value.
		\$		\$		\$
1897.....	41,532	90,950	19,154	85,507	.....	.....
1898.....	48,400	111,000	39,200	175,000	.....	.....
1899.....	62,459	178,767	38,361	171,255	.....	.....
1900.....	61,767	223,395	95,367	425,745	.....	.....
1901.....	222,694	590,560	142,837	637,665	.....	.....
1902.....	363,330	899,930	138,713	619,255	.....	.....
1903.....	371,745	888,094	189,573	846,310	.....	.....
1904.....	275,927	805,022	257,172	1,148,090	20,984	78,936
1905.....	386,366	1,054,712	269,256	1,202,035	44,866	179,464

Nova Scotia.—The coke production of Nova Scotia is practically all used in the manufacture of iron and steel in the province itself. The total production this year shows a marked increase, for which the new coking plant of the Nova Scotia Steel and Coal Company is to be partly credited. Almost 90 per cent of the Nova Scotian coke is manufactured in by-product ovens. The two largest coking plants in the province are the plant of the Dominion Iron and Steel Co., at Sydney, which consists of 10 batteries of 50 ovens each, or 500 ovens, of the Otto-Hoffman by-product type, and the plant of the Nova Scotia Steel and Coal Co., at Sydney Mines, which comprises 120 ovens of the Bernard type, and 30 Bauer ovens.

Alberta.—This province is becoming quite a factor in the production of coke. In 1904 only 20,197 tons were produced, whereas in 1905 this figure had more than doubled, having reached 44,866 tons. This is manufactured altogether from the coal of the Blairmore-Frank field, in the Crow's Nest field, on the Crow's Nest branch of the C.P.R.

The West Canadian Collieries, Limited, have a battery of 50 ovens of the Bernard type, at Lille. These are the only mechanical or by-product ovens in the west. They are of the same pattern as those recently erected (4 batteries of 30 ovens each) for the Nova Scotia Steel and Coal Company at Sydney Mines, Nova Scotia. All the other ovens in operation in the province are of the bee-hive pattern. The production of coke of Alberta is entirely consumed in Canada, mainly in the smelting centres of British Columbia.

British Columbia.—There is only a very small increase, of slightly over 12,000 tons, to record this year in the production of coke in British Columbia. In 1904, the total production amounted to 257,172 tons, whereas in 1905 this was raised to 269,266 tons. Of this quantity about 45 per cent is used locally, in the lead and copper smelters of the province, and the balance of 55 per cent is exported to the United States. All the coke ovens of British Columbia, on the mainland as well as on Vancouver Island, are of bee-hive pattern.

Below are given statistical tables of the imports and exports of coke.

TABLE 3.
COKE.
EXPORTS OF COKE.

Calendar Year.	Tons.	Value.
		\$
1897	2,987	6,078
1898	3,774	8,394
1899	5,557	18,726
1900	41,529	131,278
1901	57,505	176,990
1902	62,568	180,920
1903	32,608	135,957
1904	102,463	345,031
1905	116,071	509,908

TABLE 4.
COKE.
IMPORTS OF OVEN COKE.

Fiscal Year.	Tons.	Value.	Fiscal Year.	Tons.	Value.
		\$			\$
1880	3,837	19,353	1893	41,821	156,277
1881	5,492	26,123	1894	42,864	176,996
1882	8,157	36,670	1895	43,235	149,434
1883	8,943	38,588	1896	61,612	203,826
1884	11,207	44,518	1897	83,330	267,540
1885	11,564	41,391	1898	135,060	347,040
1886	11,858	39,756	1899	141,284	362,826
1887	15,110	56,222	1900	187,878	506,839
1888	25,487	102,334	1901	308,786	680,138
1889	29,557	91,902	1902	267,142	842,815
1890	36,564	133,344	1903	256,723	1,222,756
1891	38,533	177,605	1904	221,050	765,123
1892	43,499	194,429	1905	371,593	807,842
			1905	Duty free.	

The exports are altogether from British Columbia to the United States, and the larger proportion of these exports are to the smelting centres, immediately south of the 49th parallel. The largest item in the imports consists of the fuel supply of the various blast furnaces of Ontario.

CHROMITE.

Good progress has been made in the mining and treatment of chromite ores in the Eastern Townships of the Province of Quebec, the only district in Canada from which these ores are at present obtained. The total shipments in 1905 were approximately 8,575 tons valued at \$93,301 as compared with 6,074 tons in 1904 and 3,509 tons in 1903.

Considerable improvements have been made in the methods of mining and concentrating the ores. The treatment is the same throughout the district. The ore is sorted as it comes from the pit and all running over 40 per cent sesquioxide of chromium is graded crude No. 1 (over 47 per cent.) and No. 2 (between 40 per cent. and 47 per cent.) The waste or ore running less than 40 per cent. Cr_2O_3 is sent to the mills for concentration. Here it is crushed in jaw crushers and under stamps and concentrated in Wilfley tables. Two grades of concentrates are produced and are finding a ready market chiefly in the United States. The high grade concentrates running 50 to 54 per cent. Cr_2O_3 are competing successfully with the high grade ores of New Caledonia.

The largest operating company during the year was the Black Lake Chrome and Asbestos Company. This company remodelled its plant during the year. A mill building containing a 30 stamp mill was erected on the line of the Quebec Central Railway near Black Lake. A tram line operated by cable was built connecting the two shafts at No. 1 pit with the mill and an air compressor installed at the pit. All of this plant is operated by electric power obtained from the St. Francis Hydraulic Company,

Small shipments were also made by the American Chrome Company and the Canadian Chrome Company.

Statistics of production and exports are given in the following tables :—

TABLE 1.

CHROMITE.

ANNUAL PRODUCTION.

Calendar Year.	Tons. (2,000 lbs.)	Average price per ton.	Value.
		£ cts	£
1886.....	* 60	15 75	945
1887.....	38	15 00	570
1888 to 1893.....	no output		
1894.....	1,000	20 60	20,000
1895.....	3,177	13 00	41,300
1896.....	2,342	11 53	27,004
1897.....	2,637	12 31	32,474
1898.....	*2,021	12 00	24,252
1899.....	2,010	10 86	21,842
1900.....	2,335	11 56	27,000
1901.....	1,274	13 14	16,744
1902.....	900	14 44	13,000
1903.....	3,509	14 57	51,129
1904.....	6,074	11 05	67,146
1905.....	8,575	10 88	93,301

* Railway shipments.

TABLE 2.

CHROMITE.

EXPORTS.

Calendar Year.	Tons.	Value.
1895.....	2,908	\$ 42,236
1896.....	2,466	31,411
1897.....	2,106	26,254
1898.....	1,683	20,783
1899.....	1,509	19,876
1900.....	368	8,259
1901.....	2,259	25,444
1902.....	740	7,535
1903.....	1,013	20,524
1904.....	3,338	60,336
1905.....	5,042	45,072

GRAPHITE.

With the exception of a small amount mined near Havelock, N.B., for use in paint-making the graphite production in Canada in 1905 was all obtained from the Black Donald mine, Brougham tp., Renfrew county, and a mine in North Elmsley tp., Lanark county, Ont., operated by the Globe Refining Company of Ottawa. The total quantity of ore mined during the year was 2,138 tons of which 1,694 tons were milled; 444 tons of ore were sold crude, valued at \$8,160 while 97 tons of milled products were disposed of, valued at \$8,575 the total sales being 541 tons valued at \$16,735.

No information was received of any operations in the graphite deposits at Buckingham or at Grenville, Que.

Statistics of production, exports and imports are given in Tables 1, 2, and 3 following.

TABLE 1.
GRAPHITE.
ANNUAL PRODUCTION.

Calendar Year.	Tons.	Value.	Calendar Year.	Tons.	Value.
1886.....	500	\$4,000	1896.....	139	9,455
1887.....	300	2,400	1897.....	436	16,240
1888.....	150	1,200	1898.....		13,698
1889.....	242	3,160	1899.....	1,130	24,179
1890.....	175	5,200	1900.....	1,922	31,040
1891.....	260	1,560	1901.....	2,210	38,780
1892.....	167	3,763	1902.....	1,095	28,300
1893.....	nil.	nil.	1903.....	728	23,745
1894*.....	3	223	1904.....	452	11,760
1895.....	220	\$ 6,150	1905.....	541	16,735

* Exports.

TABLE 2.
GRAPHITE.
EXPORTS.

Calendar Year.	Value.	Calendar Year.	Value.
1886.....	\$ 3,586	1896.....	\$ 9,480
1887.....	3,017	1897.....	4,325
1888.....	1,080	1898.....	13,098
1889.....	538	1899.....	22,490
1890.....	1,529	1900.....	46,197
1891.....	72	1901.....	35,102
1892.....	3,952	1902.....	24,839
1893.....	38	1903.....	43,642
1894.....	223	1904.....	16,567
1895.....	4,833		
		Cwt.	
1905 { Crude.....		5,088	\$ 7,596
{ Manufactures of.....			518
			\$ 8,114

TABLE 3.

GRAPHITE.

IMPORTS OF RAW AND MANUFACTURED GRAPHITE.

Fiscal Year.	Plumbago.	Manufactures of plumbago.	
		Black-lead.	Other Manufactures.
1880.....	\$1,677	\$18,055	\$2,738
1881.....	2,479	26,544	1,202
1882.....	1,028	25,132	2,181
1883.....	3,147	21,151	2,141
1884.....	2,891	24,002	2,152
1885.....	3,729	24,487	2,805
1886.....	5,522	23,211	1,408
1887.....	4,020	25,766	2,830
1888.....	3,802	7,824	22,604
1889.....	3,546	11,852	21,789
1890.....	3,441	10,276	26,605
1891.....	7,217	8,292	26,201
1892.....	2,988	13,560	23,085
1893.....	3,293	16,595	23,051
1894.....	2,177	17,614	16,686
1895.....	2,586	13,922	21,988
1896.....	2,865	18,434	19,497
1897.....	1,406	17,863	20,674
1898.....	1,862	19,638	32,653
1899.....	4,979	21,334	36,490
1900.....	4,437	22,078	38,440
1901.....	2,357	25,646	49,890
1902.....	3,649	20,467	43,656
1903.....	2,870	22,559	47,117
1904.....	1,802	26,053	41,510
1905	Duty.		
	Plumbago, not ground, &c. 10 p.c.	\$2,499	
	Black-lead..... 25 "		\$30,743
	Plumbago, ground and manufactures of N.E.S., 25 "		\$13,192
	Crucibles, clay or plumbago..... Free.		31,353
Totals, 1905.....		\$2,499	\$30,743
			\$44,545

GYPSUM.

The total sales of crude, ground and calcined gypsum in 1905 amounted to 442,158 short tons, valued at \$586,168, compared with 345,961 tons valued at \$373,474, an increase of \$96,197 tons or nearly 28 per cent in quantity and \$211,694 or over 56 per cent in value.

The total quantity of gypsum mined during the year was 443,569 short tons of which 26,855 tons were calcined, making Plaster of Paris, hard wall plaster, etc.

The sales of gypsum products for the year in detail, were as follows:—

	Tons.	Value.
Crude gypsum	412,155	\$ 409,146
Ground gypsum	3,255	8,779
Plaster of Paris, wall plaster, etc.....	26,748	168,243
	442,158	\$586,168

Statistics of production, exports and imports are given in the following tables.

TABLE 1.

GYPSUM.

ANNUAL PRODUCTION.

Calendar Year.	Tons.	Value.	Average price per ton.
1886.....	162,000	\$178,742	\$ 1.10
1887.....	154,008	157,277	1.02
1888.....	175,887	179,393	1.01
1889.....	213,273	205,108	0.96
1890.....	226,509	194,033	0.86
1891.....	203,605	206,251	1.01
1892.....	241,048	241,127	1.00
1893.....	192,568	196,150	1.02
1894.....	223,631	202,031	0.90
1895.....	226,178	202,608	0.89
1896.....	207,032	178,061	0.86
1897.....	239,691	244,531	1.02
1898.....	219,256	232,515	1.06
1899.....	244,566	257,329	1.05
1900.....	252,101	259,009	1.02
1901.....	293,799	340,148	1.16
1902.....	333,599	379,479	1.14
1903.....	314,489	388,459	1.24
1904.....	345,961	373,474	1.08
1905 {	Crude gypsum.....	412,155	409,146
	Ground gypsum.....	3,255	8,779
	Plaster of Paris and wall plaster	26,748	168,243
	Total.....	442,158	586,168
			1.32

TABLE 2.

GYPSUM.

ANNUAL PRODUCTION BY PROVINCES.

CALENDAR YEAR.	NOVA SCOTIA.		NEW BRUNSWICK.		ONTARIO.		MANITOBA.	
	Tons.	Value.	Tons.	Value.	Tons.	Value.	Tons.	Value.
		\$		\$		\$		\$
1887... ..	116,346	116,346	29,102	29,216	8,560	11,715		
1888... ..	124,818	120,429	44,369	48,764	6,700	10,200		
1889.....	165,025	142,850	40,866	49,130	7,382	13,128		
1890.....	181,285	154,972	39,024	30,986	6,200	8,075		
1891.....	161,934	153,955	36,011	33,996	5,660	18,300		
1892.....	197,019	170,021	39,709	65,707	4,320	5,399		
1893... ..	152,754	144,111	36,916	41,846	2,898	10,193		
1894.....	168,300	147,644	52,962	48,200	2,369	6,187		
1895... ..	156,809	133,929	66,949	63,839	2,420	4,840		
1896... ..	136,590	111,251	67,137	59,024	3,305	7,786		
1897.....	155,572	121,754	82,658	118,116	1,461	4,661		
1898.....	132,086	106,610	86,083	121,704	1,087	4,201		
1899.....	126,754	102,055	116,792	151,296	1,020	3,978		
1900.....	138,712	108,828	112,294	145,850	1,095	4,331		
1901.....	170,100	136,947	121,595	189,709	1,504	5,692	600	7,800
1902... ..	206,987	181,425	124,041	170,153	1,917	7,699	1,554	20,202
1903... ..	189,427	173,881	119,182	172,080	2,720	21,988	3,160	20,510
1904.....	218,580	153,600	120,991	187,524	2,390	18,350	4,000	14,000
1905.....	272,252	298,248	163,553	232,586	1,853	23,834	4,500	31,500

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TABLE 3.

GYPSUM.

EXPORTS OF CRUDE GYPSUM.

Calendar Year.	NOVA SCOTIA.		NEW BRUNSWICK.		ONTARIO.		TOTAL.	
	Tons.	Value.	Tons.	Value.	Tons.	Value.	Tons.	Value.
		\$		\$		\$		\$
1874	67,830	68,164					67,830	68,164
1875	86,065	86,193	5,420	5,420			91,485	91,613
1876	87,720	87,590	4,925	6,616	120	180	92,765	94,386
1877	106,950	93,867	5,030	5,030			111,980	98,897
1878	88,631	76,695	16,335	16,435	489	675	105,455	93,805
1879	95,623	71,353	8,791	8,791	579	720	104,993	80,864
1880	125,685	111,833	10,375	10,987	875	1,240	136,935	124,060
1881	110,303	100,284	10,310	15,025	657	1,040	121,270	116,349
1882	133,426	121,070	15,597	24,581	1,249	1,946	150,272	147,597
1883	145,448	132,834	20,242	35,557	462	837	166,152	169,228
1884	107,653	100,446	21,800	32,751	688	1,254	130,141	134,451
1885	81,887	77,898	15,140	27,730	525	787	97,552	106,415
1886	118,985	114,116	23,498	40,559	350	538	142,833	155,213
1887	112,557	106,910	19,942	39,295	225	337	132,724	146,542
1888	124,818	120,429	20	50	670	910	125,508	121,389
1889	146,204	142,850	31,495	50,862	483	692	178,182	194,404
1890	145,452	139,707	30,034	52,291	205	256	175,691	192,254
1891	143,770	140,438	27,536	41,350	5	7	171,311	181,795
1892	162,372	157,463	27,488	43,623			189,860	201,086
1893	132,131	122,556	30,061	36,706			162,192	159,262
1894	119,569	111,586	40,843	46,538			160,412	158,124
1895	133,369	125,651	56,117	67,593			189,486	193,244
1896	116,331	109,054	64,946	77,535			181,277	186,589
1897	122,984	116,665	66,222	80,485			189,206	197,150
1898	99,215	93,474	70,399	81,433			169,614	174,907
1899	104,795	99,984	96,831	108,094	* $\frac{1}{2}$	12	201,626	208,090
1900							188,262	201,912
1901							236,247	231,594
1902							289,600	295,215
1903							287,496	311,580
1904							298,211	316,436
1905							359,246	388,474

*Exported from British Columbia.

TABLE 4.

GYPSUM.

EXPORTS OF GROUND GYPSUM.

Calendar Year.	Nova Scotia.	New Brunswick.	Ontario.	Total.
	\$	\$	\$	\$
1890.....				105
1891.....				588
1892.....				20,255
1893.....				22,132
1894.....	2,124	17,930		20,054
1895.....	3,364	18,827	42	22,233
1896.....	1,270	19,246	751	21,267
1897.....	1,655	5,024	84	6,763
1898.....	1,548	4,900		6,448
1899.....	205	7,898	20	8,123
1900.....				19,834
1901.....				15,337
1902.....				5,101
1903.....				12,457
1904.....				2,333
1905.....				2,673

TABLE 5.

GYPSUM.

IMPORTS OF GYPSUM, ETC.

Fiscal Year.	Crude Gypsum.		Ground Gypsum.		Plaster of Paris.	
	Tons.	Value.	Pounds.	Value.	Pounds.	Value.
1880.....	1,854	\$3,203	1,606,578	\$ 5,948	667,676	\$ 2,376
1881.....	1,731	3,442	1,544,714	4,676	574,006	2,864
1882.....	2,132	3,761	759,460	2,576	751,147	4,184
1883.....	1,384	3,001	1,017,905	2,579	1,448,650	7,867
1884.....		3,416	687,432	1,936	782,920	5,226
1885.....	1,353	2,354	461,400	1,177	689,521	4,809
1886.....	1,870	2,429	224,119	675	820,273	5,463
1887.....	1,557	2,492	13,266	73	594,146	4,342
1888.....	1,236	2,193	106,068	558	942,338	6,662
1889.....	1,360	2,472	74,390	372	1,173,996	8,513
1890.....	1,050	1,928	434,400	2,136	693,435	6,004
1891.....	376	640	36,500	215	1,035,605	8,412
1892.....	626	1,182	310,250	2,149	1,166,200	5,595
1893.....	496	1,014	140,830	442	552,130	3,143
1894.....		1,660	23,270	198	422,700	2,386
1895.....	603	960	20,700	88	259,200	1,619
1896.....	1,045	848	64,500	198	297,000	2,000
1897.....		772	45,000	123	969,900	4,489
1898.....	1,147	1,742	35,700	293	329,600	2,025
1899.....	325	692	33,900	338	496,300	3,120
1900.....	77	958	6,300	69	849,100	6,492
1901.....	286	1,125	65,400	1,097	502,200	3,978
1902.....	541	1,697	56,700	249	475,300	2,641
1903.....	1,076	2,187	68,700	228	630,800	3,599
1904.....	249	663	106,800	559	625,100	2,885
1905.....	2,344	7,386	*2,255,700	2,681	7,924,100	37,643

*Equivalent to 7,519 barrels.

Crude gypsum, duty free. Ground gypsum, duty 15%. Plaster of Paris, duty 12½c. per 100 lbs.

MANGANESE.

There has been but little manganese mining in Canada during the past few years. During 1905, the dumps on the property of the Tenny Cape Manganese Co., at Tennycape, Nova Scotia, were worked over by tributers. No direct returns of production were received but exports were reported as 22 tons valued at \$1,720 and this figure has been taken as representing the production.

TABLE 1.

MANGANESE.

ANNUAL PRODUCTION.

Calendar Year.	Tons.	Value.	Value per ton.
1886.....	1,789	\$41,499	\$23.20
1887.....	1,245	43,658	35.07
1888.....	1,801	47,944	26.62
1889.....	1,455	32,737	22.50
1890.....	1,328	32,550	24.51
1891.....	255	6,694	26.25
1892.....	115	10,250	89.13
1893.....	213	14,578	68.44
1894.....	74	4,180	56.49
1895.....	125	8,464	67.71
1896*.....	123½	3,975	32.19
1897*.....	15¼	1,166	76.46
1898.....	50	1,600	32.00
1899.....	1,581	20,004	12.65
1900.....	30	1,800	60.00
1901*.....	440	4,820	10.95
1902*.....	172	4,062	23.62
1903.....	91	2,775	30.49
1904.....	66	2,740	41.51
1905*.....	22	1,720	78.18

* Exports.

TABLE 2.
MANGANESE.
EXPORT OF MANGANESE ORE.

CALENDAR YEAR.	NOVA SCOTIA.		NEW BRUNSWICK.		TOTAL.	
	Tons.	Value.	Tons.	Value.	Tons.	Value.
1873.....			1,031	\$20,192	1,031	\$20,192
1874.....	6	\$ 12	776	16,961	782	16,973
1875.....		200	194	5,314	203	5,514
1876.....	21	723	391	7,316	412	8,039
1877.....	106	3,699	785	12,210	891	15,909
1878.....	106	4,889	520	5,971	626	10,860
1879.....	154	7,420	1,732	20,016	1,886	27,436
1880.....	79	3,090	2,100	31,707	2,179	34,797
1881.....	200	18,022	1,504	22,532	1,704	40,554
1882.....	123	11,520	771	14,227	894	25,747
1883.....	313	8,635	1,013	16,708	1,326	25,343
1884.....	134	11,054	469	9,035	603	20,089
1885.....	77	5,054	1,607	29,595	1,684	34,649
1886.....	(a) 441	30,854	1,377	27,484	(a) 1,818	58,338
1887.....	578	14,240	837	20,562	1,415	34,802
1888.....	87	5,759	1,094	16,073	1,181	21,832
1889.....	59	3,024	1,377	26,326	1,436	29,350
1890.....	177	2,583	1,729	34,248	1,906	36,831
1891.....	22	563	233	6,131	255	6,694
1892.....	84	6,180	59	2,025	143	8,205
1893.....	123	12,409	10	112	133	12,521
1894.....	11	720	45	2,400	56	3,120
1895.....	108	6,348	$\frac{3}{10}$	3	$108\frac{3}{10}$	6,351
1896.....	123 $\frac{3}{4}$	3,975			123 $\frac{3}{4}$	3,975
1897.....	15 $\frac{1}{4}$	1,166			15 $\frac{1}{4}$	1,166
1898.....	11	325			11	325
1899.....	67	2,328	3	82	70	2,410
1900.....					34	1,720
1901.....					440	4,820
1902.....					172	4,062
1903.....					135	1,889
1904.....					123	2,706
1905.....					22	1,720

(a) 250 tons from Cornwallis should more correctly be classed under the heading of mineral pigments.

TABLE 3.
MANGANESE.
IMPORTS : OXIDE OF MANGANESE.

Fiscal Year.	Pounds.	Value.	Fiscal Year.	Pounds.	Value.
1884.....	3,989	\$ 258	1895.....	64,151	\$2,781
1885.....	36,778	1,794	1896.....	108,590	4,075
1886.....	44,967	1,753	1897.....	70,663	2,741
1887.....	59,655	2,933	1898.....	130,456	5,047
1888.....	65,014	3,022	1899.....	141,356	5,539
1889.....	52,241	2,182	1900.....	126,725	4,155
1890.....	67,452	3,192	1901.....	272,134	8,176
1891.....	92,087	3,743	1902.....	476,331	5,360
1892.....	76,097	3,530	1903.....	279,611	8,051
1893.....	94,116	3,696	1904.....	275,696	7,051
1894.....	101,863	4,522	1905 Duty free...	235,289	6,832

SESSIONAL PAPER No. 26a

MICA.

According to returns received, the production of mica in Canada in 1905, was as follows.—

	Value.
Quebec.....	\$ 109,672
Ontario.....	68,563
	\$ 178,235

The demand for mica has considerably improved and higher prices have been realized, while the smaller sizes, or mica cutting 1 x 2 inches, have found a ready market.

The greater part of the Canadian production is exported to the United States as shown in Table 3 though larger shipments are now being made to European markets.

Statistics of production and exports are shown in Tables 1 and 2.

TABLE 1.
MICA.
ANNUAL PRODUCTION.

Calendar Year.	Value.	Calendar Year.	Value.
1886.....	\$ 29,008	1896.....	\$60,000
1887.....	29,816	1897.....	76,000
1888.....	30,207	1898.....	118,375
1889.....	28,718	1899.....	163,000
1890.....	68,074	1900.....	166,000
1891.....	71,510	1901.....	160,000
1892.....	104,745	1902.....	135,904
1893.....	75,719	1903.....	177,857
1894.....	45,581	1904.....	160,777
1895.....	65,000	1905.....	178,235

TABLE 2.
MICA.
EXPORTS.

Calendar Year.	Value.	Calendar Year.	Value.
1887.....	\$ 3,480	1897.....	\$ 69,101
1888.....	23,563	1898.....	110,507
1889.....	30,597	1899.....	153,002
1890.....	22,468	1900.....	146,750
1891.....	37,590	1901.....	152,553
1892.....	86,562	1902.....	(a) 391,812
1893.....	70,081	1903.....	196,020
1894.....	38,971	1904.....	198,482
1895.....	48,525	1905.....	179,049
1896.....	47,756		

(a) Probably includes some material manufactured from mica.

TABLE 3.

MICA.

*IMPORTS OF MICA INTO THE UNITED STATES FROM CANADA, YEARS ENDING JUNE 30.

Fiscal Year.	Pounds.	Value.
1895.....	546,905	\$ 39,637
1896.....	570,750	53,719
1897.....	404,080	53,399
1898.....	465,779	53,854
1899.....	1,024,098	131,310
1900.....	1,097,067	136,981
1901.....	967,904	161,741
1902.....	854,167	184,287
1903.....	834,035	196,456
1904.....	573,035	137,191
1905.....	506,917	121,560

* The Foreign Commerce and Navigation of the United States.

MINERAL PIGMENTS.

The production of ochres and barytes only are included under this heading.

Ochres.—The production of ochres in 1905 was 5,105 tons valued at \$34,675 and was all derived from deposits near Three Rivers, Champlain county, Quebec. This output was not all used in the manufacture of paint, in fact the greater proportion is represented by crude iron oxide which is shipped to many cities in Canada and exported to the United States and used in the purification of gas.

The firms mining ochres are :—

Canada Paint Co., Montreal, Que.

Champlain Oxide Co., Three Rivers, Que.

Thos. H. Argall, Three Rivers, Que.

Ontario Mineral Paint Works, Campbellville, Ont.

TABLE 1.

MINERAL PIGMENTS.

ANNUAL PRODUCTION OF OCHRES.

Calendar Year.	Tons.	Value.
1886.	350	\$ 2,350
1887.	485	3,733
1888.	397	7,900
1889.	794	15,280
1890.	275	5,125
1891.	900	17,750
1892.	390	5,800
1893.	1,070	17,710
1894.	611	8,690
1895.	1,339	14,600
1896.	2,362	16,045
1897.	3,905	23,560
1898.	2,226	17,450
1899.	3,919	20,000
1900.	1,966	15,398
1901.	2,233	16,735
1902.	4,955	30,495
1903.	6,266	32,760
1904.	3,925	24,995
1905.	5,105	34,675

TABLE 2.
MINERAL PIGMENTS.
IMPORTS OF OCHRES.

Fiscal Year.	Pounds.	Value.
1880.....	571,454	\$ 6,544
1881.....	677,115	8,972
1882.....	731,526	8,202
1883.....	898,376	10,375
1884.....	533,416	6,398
1885.....	1,119,177	12,782
1886.....	1,100,243	12,267
1887.....	1,460,128	17,067
1888.....	1,725,460	17,664
1889.....	1,342,783	12,994
1890.....	1,394,811	14,066
1891.....	1,528,696	20,550
1892.....	1,708,645	22,908
1893.....	1,968,645	23,134
1894.....	1,358,326	18,951
1895.....	793,258	12,048
1896.....	1,159,494	16,954
1897.....	1,504,044	18,504
1898.....	2,126,592	26,307
1899.....	2,444,698	31,092
1900.....	2,474,537	32,017
1901.....	2,092,067	27,267
1902.....	2,530,743	33,909
1903.....	3,215,346	42,243
1904.....	2,767,580	36,636
1905 { Ochres and ochrey earths and raw siennas.....	Duty.	
	20 p. c.	1,269,887
	25 "	1,852,803
Total, 1905.....		3,122,690
		\$35,887

TABLE 3.
MINERAL PIGMENTS.
EXPORTS OF MINERAL PIGMENTS, IRON OXIDES, ETC.

Calendar Year.	Tons.	Value.
1897.....	512	\$7,706
1898.....	283	4,227
1899.....	308	5,408
1900.....	651	7,154
1901.....	401	8,233
1902.....	352	6,182
1903.....	676	12,770
1904.....	416	7,260
1905.....	353	7,704

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Barytes.—The production of barytes in 1905 was 3,360 tons valued at \$7,500 and was all produced at Lake Ainslie in Cape Breton. The product was shipped to New York and to Montreal.

The Ainslie Mining and Railway Company of Halifax with branches in New York and Montreal have begun the exploitation of the barytes deposits at East Lake Ainslie, C.B., on a much larger scale than has hitherto been attempted.

The Company's charter includes the right to build a railway north to Cheticamp and south to the Intercolonial. At present the ore is carried across the lake a distance of about eight miles in a boat especially constructed for the purpose and thence by way of the Inverness Railway & Coal Co's. line to Port Hastings. Considerable expenditure has already been made on necessary connecting railways, tramways, wharves, &c.

TABLE 4.
MINERAL PIGMENTS.

ANNUAL PRODUCTION OF BARYTES.

Calendar Year.	Tons.	Value.
1885.	300	\$ 1,500
1886.	3,864	19,270
1887.	400	2,400
1888.	1,100	3,850
1889.		
1890.	1,842	7,543
1891.		
1892.	315	1,260
1893.		
1894.	1,081	2,830
1895.		
1896.	145	715
1897.	571	3,060
1898.	1,125	5,533
1899.	720	4,402
1900.	1,337	7,605
1901.	653	3,842
1902.	1,096	3,957
1903.	1,163	3,931
1904.	1,382	3,702
1905.	3,360	7,500

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TABLE 5.
MINERAL PIGMENTS.
IMPORTS OF BARYTES.

Fiscal Year.	Cwt.	Value.
1880.....	2,230	\$ 1,525
1881.....	3,740	1,011
1882.....	497	303
1883.....		185
1884.....		229
1885.....	7	14
1886.....		62
1887.....	379	676
1888.....	236	214
1889.....	1,332	987
1890.....	1,322	978

TABLE 6.
MINERAL PIGMENTS.
MISCELLANEOUS IMPORTS, FISCAL YEAR, 1904.

—	Duty.	Quantity.	Value.
Paint, ground or mixed in, or with either japan, varnish, lacquers, liquid dryers, collodion, oil finish or oil varnish..... Lbs.	25 p. c.		\$
Paints and colours, rough stuff and fillers, anti-corrosive and anti-fouling paints commonly used for ship hulls, N.E.S..... "	25 "	4,498,576	248,928
Paris green, dry..... "	10 "	80,765	13,779
Paints and colours ground in spirits, and all spirit varnishes and lacquers..... Galls.	\$1.12½ per gallon..	902	2,594
Putty..... Lbs.	20 p. c.	293,323	4,471
Total.....			269,772

MINERAL WATERS.

As has been stated in previous reports the following figures of production of mineral waters must be taken more or less as approximations. At a number of places in Canada where mineral springs occur, the water is being used for drinking or bathing, many are also bottled and sold in considerable quantity. At several points hotels have been erected near springs, the waters of which have curative properties. No data are available of the quantities, thus used locally. It is therefore very difficult to obtain returns which would enable accurate statistics of the industry to be compiled.

TABLE 1.
MINERAL WATERS.
ANNUAL PRODUCTION.

Calendar Year.	Gallons.	Value.	Calendar Year.	Gallons.	Value.
1888.....	124,850	\$ 11,456	1897.....	749,691	\$141,477
1889.....	424,600	37,360	1898.....	555,000	100,000
1890.....	561,165	66,031	1899.....		100,000
1891.....	427,485	54,268	1900.....		75,000
1892.....	640,380	75,348	1901.....		100,000
1893.....	725,096	108,347	1902.....		100,000
1894.....	767,460	110,040	1903.....		100,000
1895.....	739,382	126,048	1904.....		100,000
1896.....	706,372	111,736	1905.....		100,000

TABLE 2.
MINERAL WATERS.
IMPORTS.

Fiscal Year.	Value.	Fiscal Year.	Value.
1880.....	\$41,797	1893.....	27,909
1881.....	55,763	1894.....	28,130
1882.....	57,953	1895.....	27,879
1883.....	49,546	1896.....	32,674
1884.....	48,613	1897.....	22,142
1885.....	55,864	1898.....	33,314
1886.....	47,006	1899.....	38,046
1887.....	52,989	1900.....	30,343
1888.....	54,891	1901.....	40,802
1889.....	66,331	1902.....	91,871
1890.....	71,521	1903.....	108,130
1891.....	15,721	1904.....	137,304
1892.....	17,913		
1905.....			
{ Mineral waters, natural, not in bottle..... D. ty free...		\$ 630	
{ Mineral and aerated waters..... 20 p.c.		161,160	
Total		\$161,790	

NATURAL GAS.

The total value of the natural gas sold in Canada in 1905 was \$379,561 as compared with \$328,376 in 1904. The greater part of this output is derived from the wells in Ontario, the balance at Medicine Hat, Alta. There were nearly 300 producing wells in Ontario during the year and about 11 in Medicine Hat. The main field in Ontario, Welland county, is still the largest producer, the chief operating company being the Provincial Natural Gas and Fuel Company. The most recently discovered field in the counties of Haldimand and Brant is furnishing an increasing amount of gas, and the largest operator in this district, the Dominion Natural Gas Co., Ltd., has been absorbing some of the smaller operators and looking for new markets in the adjacent towns. The number of new producing wells bored in Ontario during the year was about 53.

The Medicine Hat, Alberta, gas field is yearly increasing in importance, in so far as output is concerned. The municipality is now the owner of six producing wells, supplying gas for street lighting and for sale to householders and manufacturers. The Canadian Pacific Railway owns one well put down in the railway yard, the gas being used for lighting and heating. There are in addition several privately owned wells.

It is a somewhat difficult matter to arrive at a satisfactory valuation of the gas used at Medicine Hat. In the case of the municipal plant the receipts from gas sold furnish a basis of value, but the gas from the Canadian Pacific Railway and other wells is neither measured nor sold. An endeavour has therefore been made to find the value of the services displaced, such as coal, &c., and then with a very liberal allowance for increased efficiency given by the gas the total value of the gas utilized in Medicine Hat during 1905 has been placed at \$33,000.

TABLE I.
NATURAL GAS.
ANNUAL PRODUCTION.

Calendar Year.	Value.
1892.....	\$ 150,000
1893.....	376,233
1894.....	313,754
1895.....	423,032
1896.....	276,301
1897.....	325,873
1898.....	322,123
1899.....	387,271
1900.....	417,094
1901.....	339,476
1902.....	195,992
1903.....	202,210
1904.....	328,376
1905.....	379,561

PETROLEUM.

A great deal of exploration and drilling in search of new oil fields has been carried on in 1905 in various parts of Canada, more especially in the provinces of Alberta, of British Columbia, of New Brunswick and on the Island of Manitoulin in Ontario. But apart from a small quantity obtained in New Brunswick in the vicinity of Memramcook the total Canadian production of oil has been derived from the several pools of southern Ontario.

The details of production for the past few years are as follows :—

Crude Oil.	1901.	1902.	1903.	1904.
	Bbls.	Bbls.	Bbls.	Bbls.
Received at refineries	508,677	443,333	410,280	455,074
Direct sales for industrial purposes	113,715	87,291	76,357	48,400
Total sales of crude oil.....	622,392	530,624	486,637	503,474
" in gallons.....	21,783,720	18,571,840	17,032,295	17,621,590

Production calculated on the basis of bounty paid by the Dominion Government of 1½c. per gallon.	1905.
Six months ending June 1905.	13,519,031 galls.
" " December 1905.....	8,674,305 "
Total, 1905	22,193,336 galls.
	634,095 bbls.

TABLE 1.
PETROLEUM.
CANADIAN OILS AND NAPHTHA INSPECTED AND CORRESPONDING QUANTITIES
OF CRUDE OIL.

Calendar Year.	Refined Oils Inspected.	Crude Equivalent Calculated.	Ratio of Crude to Refined.	Equivalent in Barrels of 35 Gallons	Average Price per Barrel of Crude.	Value of Crude Oil.
	Gallons.	Gallons.				
1881.....	6,457,270	12,914,540	100:50	368,987		
1882.....	6,135,782	13,635,071	100:45	389,573		
1883.....	7,447,648	16,550,328	100:45	472,866		
1884.....	7,993,995	19,984,987	100:40	571,000		
1885.....	8,225,882	20,564,705	100:40	587,563		
1886.....	7,768,006	20,442,121	100:38	584,061	80 90	8525,655
1887.....	9,492,588	24,980,494	100:38	713,728	0 78	556,708
1888.....	9,246,176	24,332,042	100:38	695,203	1 02	713,695
1889.....	9,472,476	24,664,144	100:38	704,690	0 92	653,600
1890.....	10,174,894	26,776,037	100:38	795,030	1 18	902,734
1891.....	10,065,463	26,435,430	100:38	755,298	1 33	1,010,211
1892.....	10,370,707	27,291,334	100:38	779,753	1 26	984,438
1893.....	10,618,804	27,944,221	100:38	798,406	1 09	874,255
1894.....	11,027,982	29,018,637	100:38	829,104	1 00	835,322
1895.....	10,674,232	25,414,838	100:42	726,138	1 49	1,036,738
1896.....	10,684,284	25,438,771	100:42	726,822	1 59	1,155,647
1897.....	10,434,878	24,844,995	100:42	709,857	1 42	1,011,546
1898.....	11,148,348	26,543,685	100:42	758,391	1 40	1,061,747
1899.....	11,927,981	28,399,955	100:42	808,570	1 48	1,202,020
1900.....	13,428,422	24,867,449	100:54	710,498	1 62	1,151,007

During the session of 1904 of the Dominion parliament, an act was introduced and passed providing for the payment of a bounty of one and a half cents per gallon on all crude petroleum produced from wells in Canada. The official figures of the bounty paid serve as excellent basis for calculating the production of crude oil, and they have been so adopted for the year 1905. For the previous years, between 1901 and 1904 the production is based on direct returns as indicated in the first column of the above tabulated statement. For the years previous to 1901 the production of crude oil was obtained from government inspection returns, by assuming a ratio of crude to refined, and the statistics of production on this basis will be found in Table 1. This method was open to objection, however, owing to the possible incorrectness of the ratio assumed.

There is a marked increase in 1905 over the production of 1904, for which the stimulus caused by the granting of the bounty is probably responsible. There has also been a much greater production from the Leamington field, Mersea township, Essex county, Ontario, where a new and very productive pool has been struck.

The following tables illustrate the petroleum industry of Canada, by giving the exports, imports, returns of inspection and other data.

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TABLE 2.
PETROLEUM.

VALUE OF THE PRODUCTION OF CANADIAN OIL REFINERIES.

Calendar Year.	Value.	Calendar Year.	Value.
1887.....	\$1,288,109	1897.....	1,672,429
1888.....	1,401,459	1898.....	1,825,265
1889.....	1,414,184	1899.....	1,490,870
1890.....	1,638,420	1900.....	1,620,705
1891.....	1,534,509	1901.....	1,251,373
1892.....	1,782,365	1902.....	1,222,641
1893.....	1,675,784	1903.....	1,302,104
1894.....	1,567,134	1904.....	975,840
1895.....	1,806,237	1905.....	(a) 1,815,525
1896.....	1,876,913		

(a) Derived from both Canadian and imported crude oils.

TABLE 3.
PETROLEUM.

TOTAL AMOUNT OF OIL INSPECTED, CANADIAN AND IMPORTED.

Fiscal Year	Canadian.	Imported.	Total.	Canadian.	Imported.
	Gallons.	Gallons.	Gallons.	Per cent.	Per cent.
1881.....	6,406,783	476,784	6,883,567	93.1	6.9
1882.....	5,910,747	1,351,412	7,262,159	81.4	18.6
1883.....	6,970,550	1,190,828	8,161,378	85.4	14.6
1884.....	7,656,001	1,142,575	8,798,586	87.0	13.0
1885.....	7,661,617	1,278,115	8,939,732	85.7	14.3
1886.....	8,149,472	1,327,616	9,477,088	86.0	14.0
1887.....	8,243,962	1,665,604	9,909,566	83.2	16.8
1888.....	9,545,895	1,821,342	11,367,237	84.0	16.0
1889.....	9,462,834	1,767,812	11,230,646	84.3	15.7
1890.....	10,121,210	2,020,742	12,141,952	83.4	16.6
1891.....	10,270,107	2,022,002	12,292,109	83.6	16.4
1892.....	10,238,426	2,423,445	12,667,871	80.8	19.2
1893.....	10,683,806	2,641,690	13,325,496	80.2	19.8
1894.....	10,824,270	5,633,222	16,457,492	65.8	34.2
1895.....	10,936,992	5,650,994	16,587,986	65.9	34.1
1896.....	10,533,951	5,807,991	16,341,942	64.5	35.5
1897.....	10,506,526	6,248,743	16,755,269	62.7	37.3
1898.....	10,796,847	6,880,734	17,677,581	61.1	38.9
1899.....	11,005,804	7,232,348	18,238,152	60.3	39.7
1900.....	13,014,713	*8,216,207	21,230,920	61.3	38.7
1901.....	12,674,977	*9,232,165	21,907,142	57.9	42.1
1902.....	10,494,874	*10,916,396	21,411,270	49.0	51.0
1903.....	8,615,892	*14,479,176	23,095,068	37.3	62.7
1904.....	7,292,113	*17,369,930	24,662,043	29.6	70.4
1905.....	17,520,035	*10,284,053	27,804,088	63.0	37.0

Item (a) Table 5.

TABLE 4.

PETROLEUM.

EXPORTS OF CRUDE AND REFINED PETROLEUM.

Calendar Year.	Crude Oil.		Refined Oil.		Total.	
	Gallons.	Value.	Gallons.	Value.	Gallons.	Value.
1881					501	\$ 99
1882					1,119	286
1883					13,283	710
1884					1,098,090	30,168
1885					337,967	10,562
1886					241,716	9,855
1887					473,559	13,831
1888					196,602	74,542
1889					235,855	10,777
1890					420,492	18,154
1891	446,770	\$ 18,471	585	\$104	447,355	18,575
1892	310,387	12,945	1,146	100	311,533	13,045
1893	107,719	3,696	2,196	394	109,915	4,090
1894	53,985	2,773	5,297	513	59,282	3,286
1895	22,831	1,044	10,237	2,023	33,068	3,067
1896	601	101	7,489	999	8,090	1,100
1897			342	49	342	49
1898	96	4	12,735	3,001	12,831	3,005
1899			3,425	859	3,425	859
1900	40	2	8,559	2,394	8,599	2,396
1901	14,168	691	375	66	14,543	757
1902	400	40	696	146	1,026	186
1903	350	15	1,013	190	1,363	205
1904	4,207	213	2,126	470	6,333	683
1905	35	2	7,228	2,078	7,263	2,080

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TABLE 5.

PETROLEUM.

IMPORTS OF PETROLEUM AND PRODUCTS OF.

Fiscal Year.		Gallons.	Value.
			\$
1880.		687,641	131,359
1881.		1,437,475	262,168
1882.		3,007,702	398,031
1883.		3,086,316	358,546
1884.		3,160,282	380,082
1885.		3,767,441	415,195
1886.		3,819,146	421,836
1887.		4,290,003	467,003
1888.		4,523,056	408,025
1889.		4,650,274	484,462
1890.		5,075,650	515,852
1891.		5,071,386	498,330
1892.		5,649,145	475,732
1893.		6,002,141	446,389
1894.		6,597,108	439,988
1895.		7,577,674	525,372
1896.		8,005,891	735,913
1897.		8,415,302	697,169
1898.		9,074,311	724,519
1899.		10,394,208	763,303
1900.		9,633,647	864,833
1901.		11,082,822	982,640
1902.		13,220,005	1,107,207
1903.		18,799,312	1,643,371
1904.		24,521,115	2,152,623

Oils:—			
Mineral:		Duty.	
			\$
1905.	(a) Coal and kerosene, distilled, purified or refined, naphtha and petroleum, N.E.S.	2½c. p. gall.	10,284,053
	(b) Products of petroleum	2½c. "	879,438
	(c) Crude petroleum, gas oils (other than benzine and gasoline)	1½c. "	72,533
	Petroleum crude, fuel and gas oils (8233 specific gravity) free	Free.	22,440,856
	(d) Illuminating oils composed wholly or in part of the products of petroleum, coal, shale or lignite, costing more than 30 cents per gallon	20 p. c.	10,232
	(e) Lubricating oils composed wholly or in part of petroleum, costing less than 25 cents per gallon	2½c. p. gall.	1,609,220
Total			35,296,332
			2,151,514

TABLE 6.*

PETROLEUM.

IMPORTS OF CRUDE AND MANUFACTURED OILS, OTHER THAN ILLUMINATING.

Fiscal Year.	Gallons.	Fiscal Year.	Gallons.
1881.....	960,691	1894.....	1,860,829
1882.....	1,656,290	1895.....	1,106,993
1883.....	1,895,488	1896.....	1,079,965
1884.....	2,017,707	1897.....	802,286
1885.....	2,489,326	1898.....	1,047,026
1886.....	2,491,530	1899.....	1,017,278
1887.....	2,624,399	1900.....	1,406,700
1888.....	2,701,714	1901.....	1,838,966
1889.....	2,882,462	1902.....	2,296,353
1890.....	3,054,908	1903.....	4,316,010
1891.....	3,049,384	1904.....	7,141,109
1892.....	3,047,199	1905.....	25,002,047
1893.....	1,481,749		

* The figures for the years from 1881 to 1894, inclusive, represent the total imports of petroleum and products, less the quantity of imported illuminating oils, inspected by the Inland Revenue Department. For 1895 and subsequent years, the Table is composed of items (b), (c) and (e) of Table 5.

TABLE 7.

PETROLEUM.

IMPORTS OF PARAFFINE WAX.

Fiscal Year.	Pounds.	Value.
1883.....	43,716	\$ 5,166
1884.....	39,010	6,079
1885.....	59,967	8,123
1886.....	62,035	7,953
1887.....	61,132	6,796
1888.....	53,862	4,930
1889.....	63,229	5,250
1890.....	239,229	15,844
1891.....	753,854	50,275
1892.....	733,873	48,776
1893.....	452,916	38,935
1894.....	208,099	15,704
1895.....	163,817	11,579
1896.....	150,287	10,042
1897.....	138,703	7,945
1898.....	103,570	5,987
1899.....	92,242	4,025
1900.....	47,400	3,529
1901.....	118,815	9,639
1902.....	225,885	12,750
1903.....	592,642	28,674
1904.....	418,967	18,440
1905 ..(Duty, 25 p. c.)	81,992	7,795

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TABLE 8.

PETROLEUM.

IMPORTS OF PARAFFINE WAX CANDLES.

Fiscal Year.	Pounds.	Value.	Fiscal Year.	Pounds.	Value.
1880.....	10,445	\$2,269	1894.....	10,818	\$1,685
1881.....	7,494	1,683	1895.....	19,448	2,541
1882.....	5,818	1,428	1896.....	25,787	4,072
1883.....	7,149	1,734	1897.....	25,114	2,929
1884.....	8,755	2,229	1898.....	60,802	4,427
1885.....	9,247	2,449	1899.....	62,331	5,856
1886.....	12,242	2,587	1900.....	27,663	3,671
1887.....	21,364	3,611	1901.....	44,562	3,588
1888.....	22,054	2,829	1902.....	51,120	5,752
1889.....	8,038	1,337	1903.....	83,377	9,025
1890.....	7,233	1,186	1904.....	83,471	9,078
1891.....	10,598	2,116	1905. (Duty,		
1892.....	9,259	1,952	25 p.c.).....	137,353	15,293
1893.....	8,351	1,735			

PHOSPHATE.

The production of Phosphate (Apatite) in 1905 is estimated at about 1,300 tons valued at \$8,425. With the exception of a small quantity from Ontario this is nearly all obtained from the Mica mines north of Ottawa and is all used at Buckingham.

Statistics of production and exports are given in Tables 1 and 2.

TABLE 1.

PHOSPHATE.

ANNUAL PRODUCTION.

Calendar Year.	Tons.	Average Value per ton.	Value.
1886	20,495	\$14.85	\$304,338
1887	23,690	13.50	319,815
1888	22,485	10.77	242,285
1889	30,988	10.21	316,662
1890	31,753	11.37	361,045
1891	23,588	10.24	241,603
1892	11,932	13.20	157,424
1893	8,198	8.65	70,942
1894	6,861	6.00	41,166
1895	1,822	5.25	9,565
1896	570	6.00	3,420
1897	908	4.39	3,984
1898	733	5.00	3,665
1899	3,000	6.00	18,000
1900	1,415	5.02	7,105
1901	1,033	6.07	6,280
1902	856	5.79	4,953
1903	1,329	6.18	8,214
1904	817	5.62	4,590
1905	1,300	6.48	8,425

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TABLE 2.
PHOSPHATE.
EXPORTS.

Calendar Year.	Ontario.		Quebec.		Totals.	
	Tons.	*Value.	Tons.	*Value.	Tons.	*Value.
1878.....	824	\$12,278	9,919	\$195,831	10,743	\$208,109
1879.....	1,842	20,565	6,604	101,470	8,446	122,035
1880.....	1,387	14,422	11,673	175,664	13,060	190,086
1881.....	2,471	36,117	9,497	182,339	11,968	218,456
1882.....	568	6,338	16,585	302,019	17,153	308,357
1883.....	50	500	19,666	427,168	19,716	427,668
1884.....	763	8,890	20,946	415,350	21,709	424,240
1885.....	434	5,962	28,535	490,331	28,969	496,293
1886.....	644	5,816	19,796	337,191	20,460	343,007
1887.....	705	8,277	22,447	424,940	23,152	433,217
1888.....	2,643	30,247	16,133	268,362	18,776	298,609
1889.....	3,547	38,833	26,440	355,935	29,987	394,768
1890.....	1,866	21,329	26,591	478,040	28,457	499,369
1891.....	1,551	16,646	15,720	368,015	17,271	384,661
1892.....	1,501	12,544	9,981	141,221	11,482	153,765
1893.....	1,990	11,550	5,748	56,402	7,738	67,952
1894.....	1,980	10,560	3,470	29,610	5,450	40,170
1895.....			250	2,500	250	2,500
1896.....	1	5	299	2,990	300	2,995
1897.....	70	450	165	400	235	850
1898.....	21	240	702	8,000	723	8,240
1899.....	215	1,850	93	1,725	308	3,575
1900.....					Nil	Nil
1901.....					6	120
1902.....					70	1,880
1903.....					1	20
1904.....					191	5,348
1905.....					40	1,253

*These values do not compare with those in Table 1 above; the spot value is adopted for the production whilst the exports are valued upon quite a different basis.

PYRITES.

The production of pyrites in 1905 reached a total of 33,339 tons, valued at \$125,486, as compared with 37,180 tons, valued at \$134,033 in 1904. Of the total output all but a small percentage was the product of the Eustis Mining Co. and of the Nichols Chemical Company at Eustis and Capelton, near Sherbrooke, in the Eastern Townships, province of Quebec.

In Ontario two companies were mining and shipping pyrites from Madoc and Queensboro', in Hastings county, the American Madoc Mining Company and the British American Development Company, and the total output was valued at \$21,470.

The exports of pyrites during 1905 were, according to Custom Returns, 19,755 tons, valued at \$55,767.

Statistics of the production of pyrites and of the imports of brimstone and sulphur are given in Tables 1 and 2.

TABLE 1.

PYRITES.

ANNUAL PRODUCTION.

Calendar Year.	Tons. 2,000 lbs.	Value.
		\$
1886.....	42,906	193,077
1887.....	38,043	171,194
1888.....	63,479	285,656
1889.....	72,225	307,292
1890.....	49,227	123,067
1891.....	67,731	203,193
1892.....	59,770	179,310
1893.....	58,542	175,626
1894.....	40,527	121,581
1895.....	34,198	102,594
1896.....	33,715	101,155
1897.....	38,910	116,730
1898.....	32,218	128,872
1899.....	27,687	110,748
1900.....	40,031	155,164
1901.....	35,261	130,544
1902.....	35,616	138,939
1903.....	33,982	127,713
1904.....	37,180	134,033
1905.....	33,339	125,486

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TABLE 2.

PYRITES.

IMPORTS : — BRIMSTONE AND CRUDE SULPHUR.

Fiscal Year.	Pounds.	Value.
		s
1880.	1,775,489	27,401
1881.	2,118,720	33,956
1882.	2,375,821	40,329
1883.	2,336,985	36,737
1884.	2,195,735	37,463
1885.	2,248,986	35,043
1886.	2,922,043	43,651
1887.	3,103,644	38,750
1888.	2,048,812	25,318
1889.	2,427,510	34,006
1890.	4,440,799	44,276
1891.	3,601,748	46,351
1892.	4,769,759	67,095
1893.	6,381,203	77,216
1894.	5,845,463	61,558
1895.	4,900,225	56,965
1896.	6,934,190	63,973
1897.	8,672,751	87,719
1898.	38,026,798	373,786
1899.	24,517,026	265,799
1900.	21,128,656	215,433
1901.	23,856,651	270,608
1902.	24,640,735	325,307
1903.	24,412,737	259,123
1904.	19,364,730	204,663
1905 ^a	23,435,140	242,251

^aBrimstone, crude, or in roll or flour, and sulphur in roll or flour. Duty free.

SALT.

The production and sales of salt in Canada in 1905 reached a total, according to direct returns from operators, of about 67,340 tons valued at \$320,858 while stock in hand on Dec. 31, 1905 amounted to about 5,206 tons. The value of the packages used was \$113,004. The number of men employed was about 191 and the total wages paid \$83,391. This output is derived altogether from the province of Ontario, from the deposits in the counties of Essex, Lambton, Middlesex, Huron and Bruce. Large quantities of salt exist in the underlying formations of that part of the country at depths varying from 975 feet to 1,400 feet and the industry is practically only limited by the demand.

In 1896 a few tons of salt were produced at the south end of Lake Winnipegosis, Manitoba, but the industry has not been followed up in this district. Small quantities of brine have occasionally been evaporated at Plumweseep, New Brunswick, and sold locally along the line of the Intercolonial Railway and it is reported that preparations are being made to renew production at this place.

The exports of salt, which are of small amount, are shown in Table 2. Tables 3 and 4 show the quantities and values of the salt imported. The value of salt imported on which duty is levied has ranged from \$20,000 to \$80,000 a year, the value in 1905 being \$58,056.

Salt imported from the United Kingdom or any British possession or imported for the use of the sea or gulf fisheries is free of duty, and a large portion of the trade of Eastern Canada is supplied with salt imported under this class. The quantity imported, duty free, in 1905 was 98,453 tons valued at \$340,954.

Following is a list of the chief producers of salt in Ontario :—

The Canadian Salt Co., Ltd., E. G. Henderson, vice-President.	Windsor.
Saginaw Lumber and Salt Co.	San twich.
Mooretown Salt Co., Ltd.	Mooretown.
Carter & Kittermaster	"
Sarnia Salt Co., Ltd.	Sarnia.
Sarnia Bay Mills Co.	"
Empire Salt Co.	"
Elarton Salt Works Co., Ltd., C. V. Morris.	Warwick.
Parkhill Salt Co., A. K. Hodgins.	Exeter.
Exeter Salt Works Co., J. B. Carling, Secy	"
Hensall Salt Works Co., Geo. McEwen, Secy.	Hensall.
Lake Huron and Manitoba Milling Co., Ltd., P. A. McGaw, Secy.	Goderich.
R. & J. Ransford.	Clinton.
Operating the following plants—	
Coleman Salt Works	Seaforth.
Stapleton Salt Works	Clinton.
North American Chemical Co.	Goderich.
Goderich Salt Works	"
Brussels Salt Works	Brussels.
Clinton Salt Works, John McGarva.	Clinton.
Maitland Salt Works, John S. Platt.	Goderich.
The Grey, Young & Sparling Co. of Ont., Ltd., F. G. Sparling.	Wingham.
The Ontario People's Salt & Soda Co., Ltd., John Tolmie, Secy.	Kincardine.

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TABLE 1.
SALT.
ANNUAL PRODUCTION.

Calendar Year.	Tons.	Value.
1886.....	62,359	\$227,195
1887.....	60,173	166,394
1888.....	59,070	185,460
1889.....	32,832	129,547
1890.....	43,754	198,857
1891.....	45,021	161,179
1892.....	45,486	162,041
1893.....	62,324	195,926
1894.....	57,199	170,687
1895.....	52,376	160,455
1896.....	43,960	169,693
1897.....	51,348	225,730
1898.....	57,142	248,639
1899.....	59,339	254,390
1900.....	62,655	279,458
1901.....	59,428	262,328
1902.....	64,456	292,581
1903.....	62,452	297,517
1904.....	69,477	321,778
1905.....	67,340	320,858

TABLE 2.
SALT.
EXPORTS.

Calendar Year.	Bushels.	Value.
1880.....	467,641	\$46,211
1881.....	343,208	44,627
1882.....	181,758	18,350
1883.....	199,733	19,492
1884.....	167,029	15,291
1885.....	246,794	18,756
1886.....	224,943	16,886
1887.....	154,945	11,526
1888.....	15,251	3,987
1889.....	8,557	2,390
1890.....	6,605	1,667
1891.....	5,290	1,277
1892.....	2,000	504
1893.....	4,940	1,267
1894.....	4,639	1,120
1895.....	4,865	959
1896.....	3,842	899
1897.....	5,383	1,193
1898.....	5,202	1,252
1899.....	11,205	2,773
1900.....	37,653	8,997
1901.....	39,224	6,510
1902.....	9,331	3,798
Pounds.		
1903.....	1,915,648	5,927
1904.....	1,006,036	4,186
1905.....	1,447,728	6,112

TABLE 3.

SALT.

IMPORTS :—SALT PAYING DUTY.

Fiscal Year.	Pounds.	Value.	Fiscal Year.	Pounds.	Value.
1880.	726,640	\$ 3,916	1893.	21,377,339	79,838
1881.	2,588,465	6,355	1894.	15,867,825	53,336
1882.	3,679,415	12,318	1895.	8,498,404	29,881
1883.	12,136,968	36,223	1896.	7,665,257	24,550
1884.	12,770,950	38,949	1897.	11,911,766	33,470
1885.	10,397,761	31,726	1898.	11,068,785	32,792
1886.	12,266,021	39,181	1899.	11,781,453	32,839
1887.	10,413,258	35,670	1900.	11,028,337	30,180
1888.	10,509,799	32,136	1901.	11,625,688	34,087
1889.	11,190,088	38,968	1902.	13,892,849	39,605
1890.	15,135,109	57,549	1903.	14,554,693	41,785
1891.	15,140,827	59,311	1904.	29,779,183	73,826
1892.	18,648,191	65,963			
Duty.					
1905	Salt, coarse, N.E.S.		5c. per 100 lbs.	12,320,072	\$30,950
	Salt, fine, in bulk.		5c. "	1,743,200	5,328
	Salt, N.E.S., in bags, barrels or				
	other packages.		7½c. "	4,410,596	21,778
Total				18,473,868	58,056

TABLE 4.

SALT.

IMPORTS :—SALT NOT PAYING DUTY.

Fiscal Year.	Pounds.	Value.	Fiscal Year.	Pounds.	Value.
1880.	212,714,747	\$400,167	1893.	191,595,530	281,462
1881.	231,640,610	488,278	1894.	196,668,730	328,300
1882.	166,183,962	311,489	1895.	201,691,248	332,711
1883.	246,747,113	386,144	1896.	205,005,100	338,888
1884.	225,390,121	321,243	1897.	215,844,484	312,117
1885.	171,571,209	255,719	1898.	202,634,927	293,410
1886.	180,205,949	255,359	1899.	183,046,365	267,520
1887.	203,042,332	285,455	1900.	193,554,550	295,253
1888.	184,166,986	220,975	1901.	216,271,603	339,887
1889.	180,847,800	253,009	1902.	238,648,737	385,629
1890.	158,490,075	252,291	1903.	232,708,675	361,185
1891.	195,491,410	321,239	1904.	198,634,047	338,082
1892.	201,831,217	314,995	1905*	196,907,500	340,954

*Salt imported from the United Kingdom, or any British possession, or imported for the use of the sea or gulf fisheries.

MISCELLANEOUS NON-METALLIC.

Arsenic.—Up to 1903 the main source of production of arsenic in Canada was the Deloro mine in Hastings county, province of Ontario. The arsenic was recovered in the process of treating auriferous mispickel. In 1902, however, the mine was closed and the mill continued to work on tailings and ore from the dump until 1903 when operations were abandoned. In 1904 and 1905 the arsenic production is represented by arsenical minerals contained in the ore shipped from the Cobalt district, Ontario. It cannot be definitely ascertained whether the arsenic is saved in the process of treating these ores, but it probably is.

TABLE 1.

MISCELLANEOUS NON-METALLIC.

ANNUAL PRODUCTION OF ARSENIC.

Calendar Year.	Tons.	Value.
1885	440	\$17,600
1886	120	5,460
1887	30	1,200
1888	30	1,200
1889	Nil.	Nil.
1890	25	1,500
1891	20	1,000
1892	Nil.	Nil.
1893	"	"
1894	7	420
1895	Nil.	Nil.
1896	"	"
1897	"	"
1898	"	"
1899	57	4,872
1900	303	22,725
1901	695	41,676
1902	800	48,000
1903	257	15,420
1904	(a) 72	903
1905	(a) 549	2,692

(a) Arsenic in ore, &c.

TABLE 2.
MISCELLANEOUS—NON-METALLIC.
IMPORTS OF ARSENIC.

Fiscal Year.	Pounds.	Value.	Fiscal Year.	Pounds.	Value.
1880.....	18,197	\$ 576	1893.....	447,079	\$12,907
1881.....	31,417	1,070	1894.....	292,505	10,018
1882.....	138,920	3,962	1895.....	1,115,697	31,932
1883.....	51,953	1,812	1896.....	664,854	27,523
1884.....	19,337	773	1897.....	152,275	8,378
1885.....	49,080	1,566	1898.....	291,967	14,270
1886.....	30,181	961	1899.....	582,383	24,203
1887.....	32,436	1,116	1900.....	230,730	11,035
1888.....	27,510	1,016	1901.....	159,263	8,361
1889.....	69,269	2,434	1902.....	106,857	6,004
1890.....	138,509	4,474	1903.....	298,375	11,824
1891.....	115,248	4,027	1904.....	414,065	12,421
1892.....	302,958	9,365	1905 ..Duty free.	268,274	7,661

TABLE 3.
MISCELLANEOUS—NON-METALLIC.
IMPORTS OF CHALK.

Fiscal Year.	Value.	Fiscal Year.	Value.
1880.....	\$2,117	1893.....	\$ 9,966
1881.....	2,768	1894.....	11,308
1882.....	2,882	1895.....	7,730
1883.....	5,067	1896.....	6,467
1884.....	2,589	1897.....	7,432
1885.....	8,003	1898.....	9,338
1886.....	6,583	1899.....	10,461
1887.....	5,635	1900.....	12,212
1888.....	5,865	1901.....	11,629
1889.....	5,336	1902.....	11,337
1890.....	7,221	1903.....	16,497
1891.....	8,193	1904.....	19,163
1892.....	9,558	1905*.....	20,896

* Chalk prepared. Duty, 20 p. c.

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TABLE 4.
MISCELLANEOUS—NON-METALLIC.
IMPORTS OF WHITING.

Fiscal Year.	Cwt.	Value.	Fiscal Year.	Cwt.	Value.
1880.....	84,115	\$26,092	1893.....	88,835	\$25,563
1881.....	47,480	16,637	1894.....	103,633	26,649
1882.....	36,270	16,318	1895.....	102,751	25,441
1883.....	76,012	29,334	1896.....	113,791	27,322
1884.....	76,268	28,230	1897.....	102,453	22,541
1885.....	67,441	23,492	1898.....	166,293	25,761
1886.....	65,124	25,533	1899.....	134,884	34,310
1887.....	47,246	15,191	1900.....	127,455	34,575
1888.....	76,619	20,508	1901.....	209,868	60,878
1889.....	84,658	22,735	1902.....	153,982	42,136
1890.....	96,243	27,471	1903.....	139,804	39,867
1891.....	84,679	27,504	1904.....	186,919	42,507
1892.....	102,985	26,867	1905 ^a	198,485	51,215

^aWhiting or whitening, gilder's whiting, and Paris white. Duty free

Feldspar.—The entire production of feldspar, in 1905, was derived from the province of Ontario and shipped to the United States. None of the operators in Quebec province reported any production.

The principal operators this year, were the Kingston Feldspar Mining Co., operating the Richardson Mine in Bedford township, Frontenac county, Ont., and Mr. Chas. Jenkins, of Petrolia, Ont., who is working another deposit on the south half of lot 3, con. III, of the same township.

TABLE 5.
MISCELLANEOUS—NON-METALLIC.
PRODUCTION OF FELDSPAR.

Calendar Year.	Tons.	Value.
1890.....	700	\$3,500
1891.....	685	3,425
1892.....	175	525
1893.....	575	4,525
1894.....	Nil.	Nil.
1895.....	.....	*2,545
1896.....	972	*2,583
1897.....	1,400	3,290
1898.....	2,500	6,250
1899.....	3,000	6,000
1900.....	318	1,112
1901.....	5,350	10,700
1902.....	7,576	15,152
1903.....	13,928	18,966
1904.....	11,083	22,166
1905.....	11,700	23,400

* Exports.

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Fire-clay.—The returns of fire-clay production are given in the following table. The output shown is practically all from Nova Scotia and British Columbia, and the greater proportion of this production during the past two years is to be credited to the Intercolonial Coal Co., of Westville, N.S., and the Wellington Colliery Company at Comox, Vancouver Island, B.C. In both provinces the fire-clay is mined in connexion with coal mining operations. There is a good demand for fire-clay throughout the western part of Canada and should a good deposit of this material be discovered within a reasonable distance of the railway, there would be a fair market for it.

TABLE 6.

MISCELLANEOUS—NON-METALLIC.

PRODUCTION OF FIRE-CLAY.

Calendar Year.	Tons.	Value.
1889.....	400	\$4,800
1890.....	Nil.	Nil.
1891.....	250	750
1892.....	1,991	4,467
1893.....	540	700
1894.....	539	2,167
1895.....	1,329	3,492
1896.....	842	1,805
1897.....	2,118	5,759
1898.....	670	1,680
1899.....	599	1,255
1900.....	1,245	4,130
1901.....	3,979	5,920
1902.....	2,741	4,283
1903.....	2,639	3,523
1904.....	5,972	17,463
1905.....	5,088	13,917

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TABLE 7.

MISCELLANEOUS—NON-METALLIC.

PRODUCTION OF MOULDING SAND.

Calendar Year.	Tons.	Value.
1887	160	\$ 800
1888	169	845
1889	170	850
1890	320	1,410
1891	239	1,000
1892	345	1,380
1893	4,370	9,086
1894	6,214	12,428
1895	6,765	13,530
1896	5,739	11,478
1897	5,485	10,931
1898	10,572	21,038
1899	13,724	27,430
1900	6,181	12,316
1901	14,705	29,410
1902	13,352	27,651
1903	3,638	7,256
1904	3,423	6,790
1905	*	*

* Returns incomplete.

TABLE 8.

MISCELLANEOUS—NON-METALLIC.

ANNUAL PRODUCTION OF QUARTZ.

Calendar Year.	Tons.	Value.
1890	200	\$ 1,000
1891		
1892		
1893	100	500
1894		
1895		
1896	10	50
1897		
1898	284	570
1899	600	1,260
1900-1905		

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TABLE 9
MISCELLANEOUS—NON-METALLIC.
IMPORTS OF "SILEX"—CRYSTALLIZED QUARTZ.

Fiscal Year.	Cwt.	Value.
1880.....	5,252	\$ 2,290
1881.....	3,251	1,659
1882.....	3,283	1,678
1883.....	3,543	2,058
1884.....	3,259	1,709
1885.....	3,527	1,443
1886.....	2,520	1,313
1887.....	14,533	5,073
1888.....	4,808	2,385
1889.....	5,130	1,211
1890.....	1,768	2,617
1891.....	3,674	1,929
1892.....	1,429	1,244
1893.....	2,447	1,301
1894.....	2,451	1,521
1895.....	2,882	1,881
1896.....	3,289	2,174
1897.....	2,564	3,415
1898.....	3,104	2,773
1899.....	3,951	2,595
1900.....	4,021	2,876
1901.....	3,562	2,106
1902.....	4,388	3,858
1903.....	3,514	2,762
1904.....	5,547	4,409
1905..... Duty free.	8,931	4,475

TABLE 10.
MISCELLANEOUS—NON-METALLIC.
ANNUAL PRODUCTION OF SOAPSTONE AND TALC.

Calendar Year.	Tons.	Value.	Calendar Year.	Tons.	Value.
1886.....	50	\$ 400	1896.....	410	1,230
1887.....	100	800	1897.....	157	350
1888.....	140	280	1898.....	405	1,000
1889.....	195	1,170	1899.....	450	1,960
1890.....	917	1,239	1900.....	1,420	6,365
1891.....	Nil	Nil	1901.....	259	842
1892.....	1,374	6,240	1902.....	689	1,804
1893.....	717	1,920	1903.....	990	2,739
1894.....	916	1,640	1904.....	840	1,875
1895.....	475	2,138	1905.....	500	1,800

STRUCTURAL MATERIALS.

These comprise building stone, granite, marbles, slate, flagstone, cements, lime, etc., as well as the manufactures of clay, such as bricks, tiles, drain pipe, earthenware and coarse pottery.

In the past it has been found difficult to obtain complete statistics of production. Many of these industries such as quarrying, brick-making, etc., are intermittent and are scattered over such a large area as Canada, that it has not been possible to obtain anything like full returns, so that a large proportion had to be estimated. The cement industry has been an important exception as very complete statistics of the manufacture of this product, have always been available. For 1905 an effort was made to obtain more complete statistics of brick production especially in districts where regular returns of output had not yet been obtained as in Manitoba, Saskatchewan, Alberta, British Columbia and the eastern maritime provinces. For the province of Ontario, it should be here explained, the Ontario Bureau of Mines has for a number of years obtained very complete statistics of production of clay products as well as of the other mineral output of the province and these figures as well as those for Quebec, published by the Dept. of Colonization, Mines and Fisheries, in the province of Quebec, have been utilized by the Mines Section of the Geol. Survey Dept. in estimating the total output of the Dominion. It is felt, however, that the time has arrived for the collection of more complete and uniform statistics of clay and stone products, for the whole of Canada and efforts in this direction will be continued.

Tables 1 to 12 following, show the annual production of stone, marble, granite, slate and flagstone, and the imports and exports of stone products.

The total aggregate value of the stone produced was over \$2,000,000. The value of the stone exported was but \$16,634, while the imports reached a total of \$491,671.

TABLE 1.
STRUCTURAL MATERIALS.
ANNUAL PRODUCTION OF BUILDING STONE.

Calendar Year.	Value.
1886.....	\$ 642,509
1887.....	552,267
1888.....	641,712
1889.....	913,691
1890.....	964,783
1891.....	708,736
1892.....	609,827
1893.....	1,100,000
1894.....	1,200,000
1895.....	1,095,000
1896.....	1,000,000
1897.....	1,000,000
1898.....	1,300,000
1899.....	1,500,000
1900.....	1,520,000
1901.....	1,650,000
1902.....	1,900,000
1903.....	1,975,000
1904.....	1,930,000
1905.....	1,830,000

TABLE 2.
STRUCTURAL MATERIALS.
EXPORTS OF STONE AND MARBLE, WROUGHT AND UNWROUGHT.

Calendar Year.	Wrought.	Unwrought.
1890.....	\$21,725	\$43,611
1891.....	13,398	46,162
1892.....	7,698	47,424
1893.....	9,102	12,532
1894.....	22,576	34,130
1895.....	8,587	51,616
1896.....	4,934	32,897
1897.....	9,415	42,034
1898.....	2,526	65,370
1899.....	5,092	101,931
1900.....	5,933	115,711
1901.....	5,917	157,739
1902.....	8,632	124,829
1903.....	7,684	46,295
1904.....	4,760	17,802
1905.....	3,545	13,089

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TABLE 3.

STRUCTURAL MATERIALS.

IMPORTS OF BUILDING STONE.

Calendar Year	Value.	Calendar Year.	Value.
1880.....	\$ 35,970	1893.....	\$56,510
1881.....	58,149	1894.....	52,908
1882.....	33,623	1895.....	44,282
1883.....	35,061	1896.....	54,130
1884.....	51,088	1897.....	38,714
1885.....	30,491	1898.....	28,495
1886.....	41,675	1899.....	48,040
1887.....	54,368	1900.....	64,533
1888.....	86,373	1901.....	46,078
1889.....	100,314	1902.....	99,074
1890.....	132,155	1903.....	87,866
1891.....	170,890	1904.....	93,778
1892.....	95,550		
1905 {	Flagstones, granite and rough freestone, sandstone, and all building stone, not hammered or chiselled. Duty 15 p.c....		\$49,004
	Granite and freestones, dressed; all other building stone dressed, except marble. Duty 20 p.c.....		53,813
			\$102,817

TABLE 4.

STRUCTURAL MATERIALS.

IMPORTS OF MANUFACTURES OF STONE OR GRANITE, N.E.S.

Fiscal Year.	Value.	Fiscal Year.	Value.
1880.	\$29,408	1893.	\$49,323
1881.	36,877	1894.	49,510
1882.	37,267	1895.	51,050
1883.	45,636	1896.	51,499
1884.	45,290	1897.	34,026
1885.	39,867	1898.	41,240
1886.	41,984	1899.	60,148
1887.	41,829	1900.	57,039
1888.	47,487	1901.	66,639
1889.	61,341	1902.	72,397
1890.	84,396	1903.	78,629
1891.	61,051	1904.	141,165
1892.	39,479		
1905 {	Granite—Sawn only. Duty, 20 p.c.		\$14,015
	" Finished and polished. " 35 p.c.		81,154
	" Manufactures of N.O.P. " 35 p.c.		32,319
	Paving blocks. " 20 p.c.		22,672
	Manufactures of stone, N.O.P. " 30 p.c.		
			\$150,160

TABLE 5.
STRUCTURAL MATERIALS.
ANNUAL PRODUCTION OF MARBLE.

Calendar Year.	Tons.	Value.
1886	501	\$9,900
1887	242	6,224
1888	191	3,100
1889	83	980
1890	780	10,776
1891	240	1,752
1892	340	3,600
1893	590	5,100
1894	Nil.	Nil.
1895	200	2,000
1896	224	2,405
1897 to 1905 inclusive.	Nil.	Nil.

TABLE 6.
STRUCTURAL MATERIALS.
IMPORTS OF MARBLE.

Fiscal Year.	Value.
1880.	\$ 63,015
1881.	85,977
1882.	109,505
1883.	128,520
1884.	108,771
1885.	102,835
1886.	117,752
1887.	104,250
1888.	94,681
1889.	118,421
1890.	99,353
1891.	107,661
1892.	106,268
1893.	96,177
1894.	94,657
1895.	83,422
1896.	90,065
1897.	77,150
1898.	95,894
1899.	101,879
1900.	94,017
1901.	96,159
1902.	130,424
1903.	153,481
1904.	181,511
Duty.	
1905 { Marble and manufactures of :—	20 %
Marble sawn only	35 %
Finished and polished	15 %
Rough, not hammered or chiselled.	35 %
Manufactures of, N.O.P.	35 %
Total, marble and manufactures of.	

GRANITE.

Granite both for monumental and building purposes has been quarried in Nova Scotia, New Brunswick, Quebec and British Columbia during 1905. Fairly complete returns of output were received, the total value approximating \$226,305.

In Nova Scotia the granite industry was confined during the year to the vicinities of Halifax and Middleton. Mr. John Kline, of Halifax, owns and operates the quarries at Witherod Lake, about $3\frac{1}{2}$ miles southwest of Halifax. This stone, a light grey granite, has been quarried for over twenty years and used extensively throughout Halifax in building operations including foundations, ornamental work, fences, pedestals for monuments, paving blocks, etc. The Nictaux granite at Middleton in Annapolis county is quarried by the same operator and used almost exclusively in monumental work. This stone is taken out intermittently as required and shipped in the rough to the cutting and polishing works at Witherod lake where all kinds of monumental work is undertaken. This granite has been shipped in the rough to Aberdeen, Scotland, and also to the polishing works at St. George, New Brunswick.

Quarries have also been opened at Shelbourne harbour in the southwestern part of Nova Scotia and the stone, light grey in color, has been used for paving blocks. The quarries are admirably situated for shipment.

At Whitehead in Guysborough county about 200 miles to the east of Halifax is found an area of pink granite. Though not yet worked, it is said that stone could be quarried and loaded directly to schooners at the water's edge. It has been proposed to quarry and ship this granite to London, England.

In New Brunswick granite quarrying has been an established industry for many years. The quarries are located at Hampstead, Queens county, (the Spoon island quarries), and at St. George, Charlotte county. Both these occurrences of granite have been described by Prof. Bailey in Part M., Vol. X of the Geological Reports.

The Spoon island quarries were worked during the year by Allan Appleby and Messrs. B. Mooney & Sons of St. John, N. B. The stone both light and dark gray is used extensively for monumental purposes and for this purpose is worth about \$9 per ton f. o. b., at St. John. Much of it is now shipped to the polishing works at St. George. It is also employed in building construction and has been used in foundations, bridge piers and in buildings both public and private, in Fredericton and St. John.

The granites at St. George have been worked for many years and have attained considerable fame. They are especially distinguished on

account of their bright red colour and are employed principally for monumental and ornamental purposes. The rock is quarried in the valley of the Magaguadavic river a few miles above the town of St. George and is hauled by waggon to the polishing works in the village, of which there were six in operation in 1905. The operators of polishing works all quarry their own red stone and in addition purchase rough granite of other colours, gray, black, etc., from quarries at Hampstead, N. B., and from Nova Scotia, Quebec and Maine. The total value of finished granite shipped from St. George during 1905 was a little over \$75,000. The industry is not now carried on quite so extensively as in former years, the falling off being ascribed in the first place to a public demand for other classes of granite and in the second place to the successful competition of Scotch granites due to low freight rates and the comparatively low wages paid to granite workers in Aberdeen, Scotland. The high duties on manufactured granite sent to the United States practically cut off that market.

The firms quarrying and manufacturing granite at St. George are:

Tayte Meating & Company.

Milne, Coutts & Company (Bay of Fundy Red Granite Works.)

Epps, Dodds & Company.

O'Brien & Baldwin.

McGrattan & Sons.

Messrs. Gilmour Bros. have also been quarrying a black granite about 12 miles from St. George for which there has been some considerable demand recently. The values of the red and gray granites in the rough at St. George are about \$1 per cubic foot and the black granite from \$1 to \$2 per foot. About 3,500 tons were shipped from New Brunswick quarries during the year.

Granite is of wide occurrence and is quarried at a number of places in the province of Quebec. In the county of Argenteuil, township of Chatham, a rose pink granite is obtained at the Laurentian Granite Quarries owned by J. Brunet of Montreal. The quarry is provided with steam power, steam drills, etc., and five miles of railway are being built to connect with the Canadian Pacific Railway.

In the county of Iberville, Que., a dark grey granite in three grades of fine, medium and coarse is being quarried by the Mt. Johnson Quarries Co., at Mount Johnson.

Large quantities of granite have been quarried in the township of Stanstead, Stanstead county. A number of quarries have been opened in this township and a grey or greyish white granite of fine quality is shipped. This granite is said to be close in grain, easily cut, and very strong in resisting power. During 1905 quarries were operated by James Brodie, Graniteville, Samuel B. Norton, Stanstead Junction,

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and the Stanstead Granite Quarries Co., Ltd., the latter company also operating polishing works at Beebe Plain.

In the county of Compton, Whitton township, a grey granite has been quarried at St. Cecile de Whitton and St. Samuel and shipments were made in 1905 by the Whitton Granite Company at St. Victor de Tring.

Important quarries have been worked in Portneuf county at Riviere a Pierre on the Lake St. John Railway. At this point a quarry was opened up to a considerable extent and a large quantity of stone taken out for the piers of the Quebec bridge. The Riviere a Pierre granite is very compact with coarse crystals, of a greyish colour easily cut and possesses all the necessary qualities for heavy building work. It also takes a fine polish as may be seen in that which has been used for ornamental stone in buildings at Quebec. Quarries were operated at this locality in 1905 by Jean Voyer and Jos. Perron of Rivière à Pierre.

No statistics of granite production in Ontario in 1905 have been received. In former years, however, quarries have been worked extensively near Gananoque on islands in the St. Lawrence river. These are known as the Forsythe Quarries and furnish a stone ranging in texture from coarse to fine and of varying shades of red. The product has been largely used for building and paving. Another quarry was opened at Willetsholm, six miles west of Gananoque, the stone being a blue granite obtaining its unusual colour from the dark blue felspar crystals.

Stone is frequently taken out by railway companies at convenient points along their lines for bridge building and other purposes. A granite quarry has thus been operated by the Canadian Pacific Railway at Peninsula Harbour, and the Algoma Central Railway has also opened a quarry of fine red granite on the northeast quarter section 9, Tarentorus township, within 8 miles of Sault Ste. Marie.

In the eastern and northern parts of the province granite areas are of extensive occurrence which as the demand arises and transportation becomes available will no doubt yield stone suitable for all purposes.

In British Columbia granite has been quarried on the north arm of Burrard inlet, a few miles north of Vancouver, and on Nelson and Granite islands at the mouth of Jervis inlet about 60 miles north of Vancouver. The stone is light grey in colour and can be obtained in large blocks. The quarries are operated by the Vancouver Granite Company.

TABLE 7.

STRUCTURAL MATERIALS.
ANNUAL PRODUCTION OF GRANITE.

Calendar Year.	Tons.	Value.	Calendar Year.	Tons.	Value.
1886	6,062	\$63,309	1896	18,717	106,709
1887	21,217	142,506	1897	10,345	61,934
1888	21,352	147,305	1898	23,897	81,073
1889	10,197	79,624	1899	13,418	90,542
1890	13,307	65,985	1900		80,000
1891	13,637	70,056	1901		155,000
1892	24,302	89,326	1902		210,000
1893	22,521	94,393	1903		200,000
1894	16,392	109,936	1904		150,000
1895	19,238	84,838	1905		226,305

SLATE AND FLAGSTONES.

The only slate quarries operated in Canada in recent years are those at New Rockland, Melbourne township, Richmond county, Quebec.

The production in 1905 was 4,975 squares valued at \$21,568. The output has remained about the same for the past four years.

TABLE 8.

STRUCTURAL MATERIALS.
ANNUAL PRODUCTION OF SLATE.

Calendar Year.	Tons.	Value.
1886	5,345	\$64,675
1887	7,357	89,000
1888	5,314	90,689
1889	6,935	119,160
1890	6,368	100,250
1891	5,000	65,000
1892	5,180	69,070
1893	7,112	90,825
1894		75,550
1895		58,900
1896		53,370
1897		42,800
1898		40,791
1899		33,406
1900		12,100
1901	715	9,980
1902		19,200
1903		22,040
1904		23,247
1905		21,568

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TABLE 9.
STRUCTURAL MATERIALS.
EXPORTS OF SLATE.

Calendar Year.	Tons.	Value.
1884	539	\$6,845
1885	346	5,274
1886	34	495
1887	27	373
1888	22	475
1889	26	3,303
1890	12	153
1891	15	195
1892	87	2,038
1893	178	3,168
1894	187	3,610
1895	36	574
1896	301	8,913
1897	Nil.	Nil.
1898	Nil.	Nil.
1899	Nil.	Nil.
1900	Nil.	Nil.
1901	16,750	10,000
1902 to 1905 .	Nil.	Nil.

TABLE 10.
STRUCTURAL MATERIALS.
IMPORTS OF SLATE.

Fiscal Year.	Value.	Fiscal Year.	Value.
1880.	\$21,431	1893.	\$51,179
1881.	22,184	1894.	29,267
1882.	24,543	1895.	19,471
1883.	24,968	1896.	24,176
1884.	28,816	1897.	21,615
1885.	28,169	1898.	24,907
1886.	27,852	1899.	33,100
1887.	27,845	1900.	53,707
1888.	23,151	1901.	72,187
1889.	41,370	1902.	72,601
1890.	22,871	1903.	84,437
1891.	46,104	1904.	86,057
1892.	50,441		

Duty.

1905	Slate and manufactures of—		
	Roofing slate	25% not over 75c per square	\$45,345
	School writing slates	25%	19,811
	Slate pencils	25%	7,567
	Slate of all kinds and manufactures of, N.E.S.	30%	20,505
Total.			\$93,228

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Flagstone—A small quantity of flagstone is quarried each year at Bishop's crossing, township of Dudsville, Wolfe county, Quebec. Statistics of production are given below.

TABLE 11.
STRUCTURAL MATERIALS.
ANNUAL PRODUCTION OF FLAGSTONE.

Calendar Year.	Quantity, Sq. ft.	Value.
1886.....	70,000	\$ 7,875
1887.....	116,000	11,600
1888.....	64,800	6,580
1889.....	14,000	1,400
1890.....	17,865	1,643
1891.....	27,300	2,721
1892.....	13,700	1,869
1893.....	40,500	3,487
1894.....	152,700	5,298
1895.....	80,005	6,687
1896.....		6,710
1897.....		7,190
1898.....		4,250
1899.....		7,600
1900.....		5,250
1901.....		4,575
1902.....	87,300	7,760
1903.....	79,200	6,688
1904.....	75,600	6,720
1905.....	81,000	7,650

TABLE 12.
STRUCTURAL MATERIALS.
IMPORTS OF FLAGSTONE.

Fiscal Year.	Tons.	Value.	Fiscal Year.	Tons.	Value.
1881.....	23	\$ 241	1893.....	884	8,500
1882.....	90	848	1894.....	218	2,429
1883.....	10	99	1895.....	15	84
1884.....	137	1,158	1896.....	Nil.	Nil.
1885.....	205	1,756	1897.....	13	227
1886.....	1,602	9,443	1898.....	587	1,540
1887.....	1,316	10,966	1899.....	Nil.	Nil.
1888.....	2,642	21,077	1900.....	9	63
1889.....	1,669	15,451	1901.....	14	116
1890.....	5,665	48,995	1902.....	232	1,231
1891.....	3,770	36,348	1903 to 1905*.....		Nil.
1892.....	1,571	15,048			

* Flagstones dressed. Duty, 20%. (See table 3).

CEMENT AND LIME.

The total sales of cement in 1905, both natural and Portland, amounted to 1,360,732 barrels, valued at \$1,924,014, as compared with 967,172 barrels valued at \$1,338,239 in 1904. The production of Portland cement has been increasing rapidly, while the output of natural rock cement has been as rapidly decreasing, and now forms but a small proportion of the whole.

Statistics of production since 1887 are given in Table 13 below.

TABLE 13.
STRUCTURAL MATERIALS.
ANNUAL PRODUCTION OF CEMENT.

Calendar Year.	Natural Rock Cement.		Portland Cement.		Total.	
	Barrels.	Value.	Barrels.	Value.	Barrels.	Value.
		\$		\$		\$
1887.					69,843	81,909
1888.					50,668	35,593
1889.					90,474	69,790
1890.					102,216	92,405
1891.					93,473	108,561
1892.					117,408	147,663
1893.					158,597	194,015
1894.					108,142	144,637
1895.					128,294	173,675
1896.					149,090	201,651
1897.	85,450	65,893	119,763	209,380	205,213	275,273
1898.	87,125	73,412	163,084	324,168	250,209	397,580
1899.	147,387	119,308	255,366	513,983	396,753	633,291
1900.	125,428	99,994	292,124	562,916	417,552	662,910
1901.	133,328	94,415	317,066	565,615	450,394	666,030
1902.	127,931	98,932	594,594	1,028,618	722,525	1,127,550
1903.	92,252	74,655	627,741	1,150,592	719,993	1,225,247
1904.	56,814	50,247	910,358	1,287,992	967,172	1,338,239
1905.	14,184	10,274	1,346,548	1,913,740	1,360,732	1,924,014

Natural rock cement was made by three firms in Ontario only, the plant formerly operated in Manitoba being idle during the year.

The quantity manufactured during the year was 14,184 barrels, and the same quantity was sold, valued at \$10,274. Wages paid were \$4,423 and 33 men were employed.

The prices realized at the works were 70 to 80c. per barrel of 240 lbs. net. Following is a list of firms owning plants:—

Hamilton Cement Works Hamilton, Ont.
 Queenston Cement Works Queenston, Ont.
 Battle's Thorold Cement Works Thorold, Ont.
 The Toronto Lime Co. Toronto, Ont.
 The Manitoba Union Mining Co.,
 Ltd Winnipeg, Man.

Portland cement was made by twelve companies, two in Quebec nine in Ontario, and one in British Columbia, and slag cement was made by one company in Nova Scotia. The increase in the sales of Portland cement in 1905 as compared with 1904 was 436,190 barrels and \$625,748 in value, or about 48 per cent.

The total capacity of the thirteen plants in operation was about 8,000 barrels per day. A number of plants were operated for a portion of the year only while one plant in Ontario was idle during the whole year undergoing reconstruction.

Detailed statistics of production in 1904 and 1905 are as follows :

	1904.	1905.
Portland Cement sold . . . brls.	910,358	\$1,346,548
" " manufactured	" 908,990	1,541,568
Stock on hand, Jan. 1 "	113,419	111,446
" " Dec. 31 "	112,051	306,466
Value of Cement sold . . . \$	1,287,992	\$1,913,740

The average price per barrel at the works in 1905 was \$1.42, being only a fraction of a cent higher than the average price in 1904.

The imports of Portland cement into Canada in 1905 were :

	Quantity.	Value.
Six months ending June . . cwt.	1,308,058	\$493,730
" Dec. . . . "	1,903,395	644,818
Total	3,211,453	1,138,548

This is the equivalent to 917,558 barrels of 350 pounds each at an average price per barrel of \$1.24. The duty is twelve and a half cents per hundred pounds.

The imports in 1904 were equivalent to 784,630 barrels of 350 pounds each valued at \$1,061,056, or an average price per barrel of \$1.35.

As there is very little cement exported from Canada, the consumption of this product in the country in 1905, would be approximately 1,346,548 barrels of home product and 917,558 barrels of imported, or a total of 2,264,106 barrels.

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Following is an estimate of the consumption of Portland cement in Canada for the past eight years expressed in barrels of 350 lbs. net.

	Canadian	Imported	Total
	barrels.	barrels.	barrels.
1898.....	163,084	†306,588	469,672
1899.....	225,366	†371,550	626,916
1900.....	292,124	†371,817	663,941
1901.....	317,066	*555,900	872,966
1902.....	594,594	*544,954	1,139,548
1903.....	627,741	*773,678	1,401,419
1904.....	910,358	*784,630	1,694,988
1905.....	1,346,548	*917,558	2,264,106

†Fiscal year ending June 30th.

*Calendar year.

The exports and imports of Cement are shown in the following tables. In 1903 and previous years there was more imported cement used than Canadian product. In 1904 and 1905, however, the situation was changed and more Canadian cement was used than imported, the proportion of imported Portland cement used in 1905 being about 40 per cent of the total consumption.

TABLE 14.
STRUCTURAL MATERIALS.
EXPORTS OF CEMENT.

Calendar Year.	Value.
1891.....	\$ 2,881
1892.....	938
1893.....	1,172
1894.....	482
1895.....	937
1896.....	1,328
1897.....	644
1898.....	2,117
1899.....	2,733
1900.....	3,296
1901.....	1,514
1902.....	2,267
1903.....	2,851
1904.....	5,494
1905.....	3,143

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TABLE 15.
STRUCTURAL MATERIALS.
IMPORTS OF CEMENT IN BULK OR BAGS.

Fiscal Year.	Bushels.	Value.	Fiscal Year.	Bushels.	Value.
1880.....	65	\$ 28	1893.....	12,534	\$ 2,909
1881.....	579	298	1894.....	9,027	2,618
1882.....	386	86	1895.....		2,112
1883.....	1,759	548	1896.....		3,672
1884.....	4,626	1,236	1897.....		4,318
1885.....	4,598	1,315	1898.....		3,263
1886.....	6,808	1,851	1899.....		8,929
1887.....	5,421	1,419	1900.....		10,452
1888.....	23,919	5,787	1901.....		4,890
1889.....	32,818	10,668	1902.....		12,234
1890.....	21,055	5,443	1903.....		16,281
1891.....	11,281	2,890	1904.....		14,305
1892.....	14,351	3,394	1905 [*]		18,489

*Cement, N.E.S., and manufactures of cement, Duty 20 per cent.

TABLE 16.
STRUCTURAL MATERIALS.
IMPORTS OF HYDRAULIC CEMENT.

Fiscal Year.	Barrels.	Value.
1880.....	10,034	\$ 10,306
1881.....	7,812	7,821
1882.....	11,945	13,410
1883.....	11,659	13,755
1884.....	8,606	9,514
1885.....	5,613	5,396
1886.....	6,164	6,028
1887.....	6,160	8,784
1888.....	5,636	7,522
1889.....	5,835	7,467
1890.....	5,440	9,048
1891.....	3,515	6,152
1892.....	2,214	2,782
1893.....	4,896	8,060
1894.....	1,054	985
1895.....	5,333	7,001
1896.....	5,688	8,948
1897.....	2,494	3,937
	Cwt.	
1898.....	16,033	7,097
1899.....	1,678	694
1900.....	10,418	4,711
1901.....	17,784	6,865
1902.....	29,585	17,755
1903.....	13,690	6,333
1904.....	12,088	5,391
1905 (Cement hydraulic or waterlime)*.....	16,961	10,690

*Duty, 12½c. per 100 lbs.

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TABLE 17.
STRUCTURAL MATERIALS.
IMPORTS OF PORTLAND CEMENT.

Fiscal Year.	Barrels.	Value.	Fiscal Year.	Barrels.	Value.
1880.....		\$ 55,774	1894.....	224,150	\$280,841
1881.....		45,646	1895.....	196,281	242,813
1882.....		66,579	1896.....	204,407	242,409
1883.....		102,537	1897.....	210,871	252,587
1884.....		102,857		Cwt.	
1885.....		111,521	1898.....	1,073,058	355,264
1886.....		120,398	1899.....	1,300,424	467,994
1887.....	102,750	148,054	1900.....	1,301,361	498,607
1888.....	122,402	177,158	1901.....	1,612,432	654,595
1889.....	122,273	179,406	1902.....	1,971,616	833,657
1890.....	192,322	313,572	1903.....	2,316,853	868,131
1891.....	183,728	304,648	1904.....	2,476,388	995,017
1892.....	187,233	281,553	1905 (Portland)*.	3,228,394	1,234,649
1893.....	229,492	316,179			

* Duty, 12½c. per 100 lbs.

We give below a list of the companies engaged in the manufacture of Portland cement during 1905.

Sydney Cement Co., Sydney, C.B.
Crescent Cement Works, Longue Point, Que.
International Portland Cement Co., Toronto, Ont., and Hull, Que.
Canadian Portland Cement Co., Deseronto, Ont.
Lakefield Portland Cement Co., Lakefield, Ont.
Imperial Portland Cement Co., Owen Sound, Ont.
Owen Sound Portland Cement Co., Ltd., Owen Sound, Ont.
Grey and Bruce Portland Cement Co., Ltd., Owen Sound, Ont.
Sun Portland Cement Co., Ltd., Owen Sound, Ont.
Hanover Portland Cement Co., Hanover, Ont.
National Portland Cement Co., Toronto and Durham, Ont.
Belleville Portland Cement Co., Belleville, Ont.
Ontario Portland Cement Co., Brantford, Ont.
Vancouver Portland Cement Co., Victoria, B.C.

Companies with works in process of erection, and companies proposing to erect plants :—

Colonial Portland Cement Co., Wiarton, Ont.
Raven Lake Portland Cement Co., Toronto and Victoria Road, O.
Superior Portland Cement Co., Orangeville, Ont.
Standard Portland Cement Co., Toronto, Ont.
Lehigh Portland Cement Co., Belleville, Ont.
Manitoba Portland Cement Co., Winnipeg, Man.
Alberta Portland Cement Co., Calgary, Alta.
Western Canada Coal and Cement Co., Exshaw, Alta.

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In Nova Scotia a plant has been established by the Sydney Cement Co., at Sydney, for the manufacture of cement from blast furnace slag. This is the first plant of its kind to be established in Canada, although slag cement or Puzzolan cement (the latter name having been adopted in the United States) have been manufactured for some years both in the United States and in Europe.

TABLE 18.

STRUCTURAL MATERIALS.

PRODUCTION OF ROOFING CEMENT.

Calendar Year.	Tons.	Value.
1890.....	1,171	\$ 6,502
1891.....	1,020	4,810
1892.....	800	12,000
1893.....	951	5,441
1894.....	815	3,978
1895.....		3,153
1896.....	86	430
1897 to 1905 inclusive.....	Nil.	Nil.

TABLE 19.

STRUCTURAL MATERIALS.

ANNUAL PRODUCTION OF LIME.

Calendar Year.	Value.	Calendar Year.	Value.
1886.....	\$283,755	1896 estimated.....	650,000
1887.....	394,859	1897 ".....	650,000
1888.....	339,951	1898 ".....	650,000
1889.....	362,848	1899 ".....	800,000
1890.....	412,308	1900 ".....	800,000
1891.....	251,215	1901 ".....	830,000
1892.....	411,270	1902 ".....	892,000
1893 estimated.....	900,000	1903 ".....	900,000
1894 ".....	900,000	1904 ".....	780,000
1895 ".....	700,000	1905 ".....	750,000

TABLE 20.
STRUCTURAL MATERIALS.
EXPORTS OF LIME.

Calendar Year.	Value.
1891.....	\$119,853
1892.....	121,535
1893.....	86,623
1894.....	83,670
1895.....	71,597
1896.....	70,820
1897.....	53,177
1898.....	49,594
1899.....	73,565
1900.....	80,852
1901.....	99,194
1902.....	116,009
1903.....	131,412
1904.....	73,838
1905.....	85,723

TABLE 21.
STRUCTURAL MATERIALS.
IMPORTS OF LIME.

Fiscal Year.	Barrels.	Value.
1880.....	6,100	\$ 6,013
1881.....	5,796	4,177
1882.....	5,064	5,365
1883.....	7,623	9,224
1884.....	10,804	11,200
1885.....	12,072	11,503
1886.....	11,021	9,347
1887.....	10,835	8,524
1888.....	10,142	7,537
1889.....	13,079	9,363
1890.....	8,149	5,360
1891.....	6,259	4,273
1892.....	6,132	4,241
1893.....	6,879	4,917
1894.....	6,766	4,907
1895.....	12,008	5,743
1896.....	10,239	7,331
1897.....	16,108	10,529
1898.....	12,850	9,002
1899.....	15,720	11,124
1900.....	12,865	11,211
1901.....	19,657	14,534
1902.....	24,602	17,584
1903.....	31,108	22,470
1904.....	54,359	39,639
1905.....Duty, 20 p.c.	98,676	71,588

BRICK AND CLAY PRODUCTS.

Statistics of the production of brick in Canada are given in Table 22. As already explained these have in the past been largely estimated, the figures for 1903, however, represent for the eastern and western provinces, direct returns and for Ontario and Quebec include the figures of brick production as published by the Mining Bureaus of these provinces. The figures of production for 1905, therefore, can safely be taken as underestimated although they are nearly a million dollars higher than the output published for 1904.

TABLE 22.

STRUCTURAL MATERIALS.

ANNUAL PRODUCTION OF BUILDING BRICKS.

Calendar Year.	Value.
1886.....	\$ 873,600
1887.....	986,689
1888.....	1,036,746
1889.....	1,273,884
1890.....	1,266,982
1891.....	1,061,536
1892.....	1,251,934
1893.....	1,800,000
1894.....	1,800,000
1895.....	1,670,000
1896.....	1,600,000
1897.....	1,600,000
1898.....	1,900,000
1899.....	2,195,000
1900.....	2,275,000
1901.....	2,400,000
1902.....	2,593,000
1903.....	2,832,000
1904.....	2,983,000
1905.....	3,933,925

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TABLE 23.
STRUCTURAL MATERIALS.
EXPORTS OF BRICKS.

Calendar Year.	M.	Value.
1891.....	246	\$ 1,163
1892.....	1,963	12,192
1893.....	6,073	44,110
1894.....	1,095	7,405
1895.....	1,655	8,665
1896.....	983	5,678
1897.....	573	2,679
1898.....	65	442
1899.....	172	1,351
1900.....	546	4,528
1901.....	646	5,189
1902.....	2,110	12,786
1903.....	891	5,699
1904.....	696	5,357
1905.....	754	5,888

TABLE 24.
STRUCTURAL MATERIALS.
IMPORTS OF BUILDING BRICK.

Fiscal Year.	Value.
1880.....	\$ 2,067
1881.....	4,281
1882.....	24,572
1883.....	14,234
1884.....	20,258
1885.....	14,632
1886.....	5,929
1887.....	2,440
1888.....	20,720
1889.....	24,585
1890.....	12,500
1891.....	9,744
1892.....	5,075
1893.....	14,108
1894.....	18,320
1895.....	4,705
1896.....	23,189
1897.....	10,336
1898.....	6,652
1899.....	21,306
1900.....	19,305
1901.....	20,677
1902.....	33,802
1903.....	28,493
1904.....	117,468
1905.....Duty, 20 p.c.	168,122

TABLE 25.
STRUCTURAL MATERIALS,
IMPORTS OF PAVING BRICK.*

Fiscal Year.	Value.
1898	\$ 2,337
1899	23,648
1900	35,644
1901	10,414
1902	16,788
1903	18,811
1904	29,753
1905	32,578

*Duty 20 p.c.

TABLE 26.
STRUCTURAL MATERIALS.
PRODUCTION OF TERRA COTTA, &c.

Calendar Year.	Value.	Calendar Year.	Value.
1888	\$ 49,800	1897	155,595
1889	Not available.	1898	167,902
1890	90,000	1899	220,258
1891	113,103	1900	259,450
1892	97,239	1901	278,671
1893	55,704	1902	276,241
1894	65,600	1903	405,796
1895	195,123	1904	(a)
1896	83,855	1905	(a)

(a) Included in Table 22.

TABLE 27.
STRUCTURAL MATERIALS.
PRODUCTION OF SEWER PIPES, &c.

Calendar Year.	Value.
1888	\$266,320
1889	Not available.
1890	348,000
1891	227,300
1892	367,660
1893	350,000
1894	250,325
1895	257,045
1896	153,875
1897	164,250
1898	181,717
1899	161,546
1900	231,525
1901	248,115
1902	301,965
1903	317,970
1904	440,894
1905	382,000

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TABLE 28.
STRUCTURAL MATERIALS.
IMPORTS OF DRAIN TILES AND SEWER PIPES.

Fiscal Year.		Value.
1880		\$ 33,796
1881		37,368
1882		70,065
1883		70,699
1884		71,755
1885		69,589
1886		57,953
1887		71,203
1888		101,257
1889		83,215
1890		77,434
1891		87,195
1892		59,537
1893		39,001
1894		24,625
1895		21,053
1896		19,296
1897		34,286
1898		29,611
1899		33,898
1900		39,149
1901		56,083
1902		55,530
1903		57,352
1904		55,595
1905	Duty.	
	Drain tile, not glazed..... 20 %	\$ 1,229
	Drain pipes, sewer pipes, chimney linings or vents, chimney tops and inverted blocks, glazed or unglazed..... 35 %	101,166
Total.....		\$102,395

TABLE 29.
STRUCTURAL MATERIALS.
ANNUAL PRODUCTION OF POTTERY.

Calendar Year.	Value.	Calendar Year.	Value.
1888	\$ 27,750	1897	129,629
1889	Not available	1898	214,675
1890	195,242	1899	185,000
1891	258,844	1900	200,000
1892	265,811	1901	200,000
1893	213,186	1902	200,000
1894	162,144	1903	200,000
1895	151,588	1904	140,000
1896	163,427	1905	120,000

TABLE 30.
STRUCTURAL MATERIALS.
IMPORTS OF EARTHENWARE.

Fiscal Year.	Value.	Fiscal Year.	Value.
1880.	\$322,333	1893.	\$709,737
1881.	439,029	1894.	695,514
1882.	646,734	1895.	547,935
1883.	657,886	1896.	575,493
1884.	544,586	1897.	595,822
1885.	511,853	1898.	675,874
1886.	599,269	1899.	916,727
1887.	750,691	1900.	959,526
1888.	697,082	1901.	1,114,677
1889.	697,949	1902.	1,275,093
1890.	695,206	1903.	1,406,610
1891.	634,907	1904.	1,611,356
1892.	748,810		
Earthenware and china :—		Duty.	
1905	Baths, tubs and washstands, of earthenware, stone cement or clay, or of other material, N.O.P.....	30 %	\$ 73,569
	Brown or coloured earthen and stoneware, and Rockingham ware.....	30	15,464
	Decorated, printed or sponged, and all earthenware, N.E.S.....	30 %	169,102
	Demijohns, churns and crocks.....	30 %	8,158
	White granite or ironstone ware, C.C. or cream coloured ware.....	30 %	37,706
	Tableware of China, porcelain or other clay.....	30 %	995,465
	China and porcelain ware.....	30	199,960
	Earthenware tiles.....	35 %	65,181
	Manufactures of earthenware, N.E.S.....	30 %	71,609
	Total		1,636,214

TABLE 31.
STRUCTURAL MATERIALS.
EXPORTS OF SAND AND GRAVEL.

Calendar Year.	Tons.	Value.
		\$
1893.	329,116	121,795
1894.	324,656	86,940
1895.	277,162	118,359
1896.	224,769	80,110
1897.	152,963	76,729
1898.	165,954	90,498
1899.	242,450	101,640
1900.	197,558	101,666
1901.	197,302	117,465
1902.	159,793	119,120
1903.	355,792	124,006
1904.	399,809	129,803
1905.	306,935	152,805

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FOLDS IN LIMESTONE, MOUNT KIDD. KANANASKIS RIVER IN FOREGROUND.

GEOLOGICAL SURVEY OF CANADA

A. P. LOW, DEPUTY HEAD AND DIRECTOR

REPORT

ON THE

CASCADE COAL BASIN

ALBERTA

BY

D. B. DOWLING, B.A.Sc.



OTTAWA

PRINTED BY S. E. DAWSON, PRINTER TO THE KING'S MOST
EXCELLENT MAJESTY

1907

To A. P. Low, Esq.,

Director and Deputy Head.

Geological Survey of Canada.

SIR,—I beg to submit herewith a report on the geology of the Cascade Coal basin. An outline only of the geology and topography is given, as these are very fully illustrated in the sections and on the map sheets that accompany this report.

The body of the report deals mainly with the economic features of the area—character of the coal, thickness of seams, attitude of the beds and extent of the measures. Much time has been consumed in attending to the topographic details, and the report is, therefore, not as full as I should wish.

I have the honour to be, sir,

Your obedient servant,

D. B. DOWLING.

GEOLOGICAL SURVEY OFFICE,

OTTAWA, May 25, 1906.

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REPORT

ON THE

CASCADE COAL BASIN,

ALBERTA.

By D. B. Dowling.

INTRODUCTION.

The area illustrated on the accompanying map sheets lies within and to the east of the summit of the Rocky mountains. The sections which accompany each sheet are intended to aid the understanding of the general structure, which will be seen to consist mainly of simple types of long, narrow fracture blocks tilted up sidewise and resting against each other. There is in many cases a certain amount of overlap, and the whole series suggests that the work of mountain building progressed from the east towards the west. The structure also bears a rude resemblance to the form assumed by shore-pressed ice when fractured, and the outer cakes are pushed above those nearer the shore.

The great break in the crust of the earth which probably marked the inauguration of the mountain building forms the outer range of mountains, and those who have studied it assert that it was of great dimensions. Mr. McConnell observed at the gap of the Ghost river an overthrust of more than two miles, with an upthrust of many thousands of feet. After this great break, and the overlap of one part of the crust on another, it would seem that the lateral pressure was greatly relieved, but the west to east pressure is marked by many huge breaks and folds. The upturning of the edge along the first crack induced other fractures parallel to the first and at short distances behind. These fractures probably run along the line of sharp folds, but in each case the rocks of the western block have mounted above those to the east. If there had been no subsequent denudation each of those blocks would have been crowned on its westward sloping side by the highest beds of the original crust, but as these rocks were easily carried off there is generally but a small remnant left, and the harder beds—in this case the Carboniferous limestones—show up strongly, and form the mountain chains.

The softer sandstones of the Cretaceous, where any portion is left, are in the valleys and up against the edge of the next succeeding block. Variations in the structure occur: a fault block may have one end strongly tilted up and probably thrust higher than the other end, while the break along its front changes from a fault at the higher end to probably a sharp fold at the lower end. An instance of this can be traced in the northern continuation of Cascade mountain. The fault along the eastern face of this ridge passes into a fold before that part is reached which is shown on the northern edge of the Cascade sheet. The section at the bottom of this sheet shows a displacement near Bankhead of about 15,000 feet, vertically, between contiguous beds, but on the section at the top of the same sheet shows a fold which throws all the beds about 3,000 feet out of alignment.

6-7 EDWARD VII., A. 1907

In the narrow blocks, since the eastern edges of all are pushed to approximately the same level, the elevation above the sea of the western edge is higher than when the block has a more generous width. Erosion is more pronounced in the higher altitudes, and consequently there is seldom any remnant of the upper and softer rocks along the western edges of the narrow blocks.

In the wider blocks, indicated by greater distance between mountain ranges, there is a better chance of finding remnants of the softer rocks of the upper part of the section. This is very well illustrated on the map sheets and in the appended sections. The general structure is thus intimately connected with the possibilities of finding coal-bearing rocks, and then in obtaining a fair conception of the extent and position of the measures.

A short discussion of the several rock series exposed, and the general structure for each sheet, is introduced, with somewhat fuller notes relative to the coal-bearing rocks.

GENERAL GEOLOGY.

The rock formations exposed in this part of the Rocky mountains give a continuous section from the highest remaining beds of the Cretaceous down to the bottom of the Carboniferous, showing a thickness of the earth's crust for this amount of sediment—of 14,750 feet, or 2.78 miles. Below this Devonian limestones are sometimes exposed for another 1,500 feet, but still lower beds are shown in the valley of the upper part of Panther river, and these would add probably another mile to the exposed thickness. The several series briefly described in their order of occurrence in the section beginning at the highest are here given.

CRETACEOUS.

Upper Ribbed Sandstone.—In the section on the eastern face of Cascade mountain a series of thin bedded sandstone and shales appears above a strong rib of coarse sandstone which may be taken as the limiting member of the coal-bearing beds beneath. On the higher parts of the plateau south of the Bow river strong sandstone beds with occasional conglomerates may be assumed to occupy nearly the same horizon. These cap the coal-bearing series there, and are coloured on the map to correspond with the ribbed sandstone of Cascade mountain. The top of the formation is always denuded, so that the character of the series above is unknown. A thickness of 550 feet for this series has been measured to the broken beds at the fault line.

Kootanie Coal Measures.—Between two strong sandstone ribs, forming the top and bottom members, lie beds of sandstone and shale enclosing many valuable coal seams. The total thickness exposed on the Cascade river is 2,800 feet, including the heavy sandstone. In the hills south of the Bow river ten or eleven seams of coal, over four feet thick, have been found. North of Bankhead, on the slope of Cascade mountain, fourteen possibly workable seams occur.

Lower Ribbed Sandstone.—Thin bedded sandstone and shale, generally brown in colour but containing no coal, lie below the sandstone rib at the base of the coal formation. A thickness of 10,000 feet was measured on the Cascade, but this thickness may not continue to the south, although the Cretaceous as a whole does not appear to lose in thickness, and it is possible that the coal measures invade the underlying sands and shales below.

JURASSIC.

Fernie Shale.—Black shales with grey sandstones and an occasional limestone bed toward the base occupy the same position relative to the Kootanie and the older rocks beneath as similar series at Fernie, where they hold a few Jurassic fossils. Here, but few fossils were found, and they bear a similarity to some of those at Fernie. In a small exposure near the east end of Minnewanka lake a series of fossils that



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appear to be Jurassic were collected some years ago by Mr. McConnell, so that the correlation does not seem to be in doubt. These shales frequently outcrop in the area now mapped, but the best section is that on Cascade river, where a measured section gave a thickness of 1,600 feet.

PERMO-TRIASSIC

Upper Banff Shale.—The Permian age of these beds is not well proven, but their position between Jurassic and Carboniferous rocks warrants the assumption until definite proof be obtained. They are capped by yellow dolomitic limestone, possibly 100 feet in thickness, but the mass of the formation is a reddish weathering, dark, sandy shale. In distant exposures, these beds have been mistaken for the Cretaceous which lie above. The thickness is very uniform at about 1,200 to 1,300 feet.

CARBONIFEROUS.

Rocky Mountain Quartzite.—This is a series of fine-grained sandstones generally of a light yellow tint, and as they are the top of the harder rocks of the section they frequently form the lower slopes of the westward side of the fault block, and can be seen on the eastern sides of the large valleys. The lower part of this formation is of a greyish-white, and very closely resembles the underlying limestones. The summit of Pigeon mountain is of this sandstone, yet at a distance it might be taken for a limestone. A thickness of 1,600 feet would be a good average for the formation.

Upper Banff Limestone.—These are light bluish and grey limestones. The top beds are thicker than those below, where grey and dark shales appear in bands towards the middle of the formation, and the limestones become thinner bedded. In the thin bedded members many corals are found, and in the more shaly beds they weather out in very perfect specimens. The change to the shales of the division beneath is not abrupt, and the dividing line, therefore, is not well marked, especially as north and south from the typical locality near Banff, limestone bands appear in the lower shale members. The thickness may be said to vary from 2,500 to 3,000 feet.

Lower Banff Shale.—As remarked above, the division between this and the upper limestone is not well marked. The series is generally a dark grey shale, but is often brownish weathering from the presence of a small percentage of iron. This formation varies in thickness from 1,000 to 1,500 feet.

Lower Banff Limestone.—This consists of a heavy bedded series of limestones without shaly partings. The formation is readily discerned on the broken face of a mountain range, as it is not weathered to regular slopes, but forms bold escarpments generally tinged with yellow and brown on weathered surfaces. Conspicuous cliffs of this limestone face the valley of the Bow from the Rundle range. It forms the lower and middle peaks of the Three Sisters, and is also seen in the steep wall that towers above the mining town of Bankhead. The average thickness of the formation is about 2,000 feet.

DEVONIAN.

Intermediate Series.—A few exposures of the yellow and brownish coloured dolomitic limestones are to be seen low down along the face of the Rundle range. They appear in greatest thickness in the Vermilion range at the gap of the Panther river. There they are noticeable for the ribboned appearance from alternate bands or beds of light and dark yellow. The lower portion forms the eastern edge of the range, and is faulted so as to rest upon the red beds of the Upper Banff Shale.

The maps that show the distribution of the various formations enumerated above need no very extended explanation, and the general geology of the section across the basin is so well discussed by Mr. McConnell in Part D., Annual Report, Vol. II. (N.S.), that the present report will deal more specifically with the coal-bearing areas and the coal mines in operation.

GENERAL NOTES ON THE PHYSICAL STRUCTURE.

WIND MOUNTAIN SHEET.

Three parallel mountain ranges are shown on this sheet. In the northeastern corner the valley of the Bow river cuts through the eastern one, while at the south another in which the Kananaskis flows crosses two of them. The general structure shown by the geological colouring and the sections at the top and bottom of the map is the result of two parallel faults with downthrow on the eastern side, thus forming three great blocks all tilted to the west. The fault which runs through the middle of the sheet shows a displacement at the south of 10,000 feet and in the vicinity of the Three Sisters about 12,500 feet. The one to the west passing near the Spray lakes shows less displacement (about 6,000 feet), so that the Cretaceous rocks were left originally at a great elevation and have since been denuded. The eastern block is wider than the others, and has not suffered so much tilting, although its eastern edge has been raised very high by a sharp upturn. The beds forming the softer portions covering the harder limestones are not all eroded away, and a large area of the coal-bearing beds consequently remains.

On the high land just to the east of Wind mountain, in the centre of the sheet, these coal measures occupy a synclinal trough, but there is evidence that the western margin of this upturned series of rocks, in the under beds at least, suffers another flexure that bends them down again, and is thus in part overridden by the limestone of the mountain mass to the west. On the Kananaskis river, where the valley is cut down through nearly the whole of the Cretaceous series, the lower beds dip toward the fault and, continuing south a short distance, are cut off as they reach the fault line. Two synclinal folds are developed in the measures in front of the fault: these split the formation into two narrow much compressed troughs which rise to the south and disappear in the mountains. The effect of the great pressure from the west is shown not only in the pushing up of these blocks against each other but also in the crumpling of the measures against which they rest. The Cretaceous beds being generally soft sandstones and shales naturally give way by bending and crumpling, but in the limestone ranges other folds appear. A series of waves, small near the contact line, traverse the range from behind Mount Kidd through and beneath Wind mountain, and reach the face of the range near the Three Sisters. The lowest peak of this group is merely a block of the same hard limestone which forms the middle one, and a reference to the section at the top of the Wind Mountain sheet will illustrate this. These small folds increase in size, and the illustration showing the folds in the south face of Mount Kidd will serve to show the remarkable amount of bending that is possible in the limestone without fracture. South from this point the increase in lateral and vertical movement leads to a final break, and the continuation of the Kananaskis valley for a short distance is eroded along this fracture. The illustration which is used as a frontispiece is the one referred to, and shows the point to which the erosion of the valley along this steep fold was carried. Northward these folds reach the line of the fault beneath Wind mountain.

CANMORE SHEET.

Along the eastern portion of this sheet a line of fault is developed, but where it should cross the Bow river there is only a sharp fold. The effect of this additional break is to allow the central block to tip more steeply to the west, and the coal measures are at a greater slope than the same beds in the sheet to the south. On the slopes of Pigeon mountain the general dip is seen to be quite uniform, but on the north side of the Bow river there is, on the slopes of Grotto mountain, a more abrupt change. In the main mass of the mountain the beds dip very gently to the west, but along the western margin there is quite an abrupt downturn which in some places looks like a break. An attempt to illustrate this is given in the subjoined sketch.

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BEND IN STRATA, GROTTO MOUNTAIN.

Owing to the tilting of the beds at a high angle to the west the coal rocks come lower down in the valley and dip toward the fault line. As the sliding of the limestone in the Rundle Mountain ridge was upward over part of these beds, a series of waves might be expected in them parallel to the fault line. Those that are found have, however, a pitch downward to the south, which seems to denote a pressure and movement not at right angles to the fault line but from a more westward direction. A possible explanation may lie in the fact that the fault line north of Bankhead or Anthracite is deflected to the north and dies out, or changes, to a fold of lessening dimensions. This gives then a pivotal point on which a large block can be assumed to have turned, which would allow of a sliding of the limestone upward from a direction at a slight angle with the fault line. The part of the field thus affected extends from near Anthracite to the foot of the hill below the Three Sisters, but the beds to the east of a line running north and south through Canmore are not so much disturbed, although west of this line they dip downward through a series of curves, as already noted. At Anthracite the seams do not appear affected by this series of small waves, but there is instead a much larger fold pitching downward in nearly the same manner as to the south. The cause of this fold is possibly traceable to the change in the direction of the further continuation of these beds up the valley to the north, and also to the fact that here the maximum displacement along this fault line is found. As mentioned in the discussion of the Wind Mountain sheet, the throw of the fault at the south edge of the sheet was 12,500 feet; it has reached at least 15,000 feet at the northern edge of the Canmore sheet, or rather in the vicinity of Anthracite. The fault which starts north of the Bow river and runs east of the Fairholme range has a throw of 6,500 feet as it crosses Minnewanka lake.

The face of Rundle mountain, as seen from Bow valley, shows a typical section of the rocks of the lower part of the Carboniferous. The heavy bedded Lower Banff limestone stands out in almost vertical cliffs, above which the thinner bedded and more easily eroded shales and limestones form gentler slopes.

The same beds are repeated in the Sulphur range to the west by a similar fault line to that in front of Rundle mountain. The throw of this fault behind the Three Sisters is about 6,000 feet. Northward the throw does not seem to be so great, but the difference is made up by the beds of the Rundle block dipping down very steeply and making a synclinal fold in front of the fault line. This deep fold penetrates so far beneath the surface that many of the springs that find their way up along the beds and the fault are of a high temperature. They are situated approximately along the line of fault, and must come from a great depth, as the temperature in some of them is above 100 degrees.

The break in the range by which the Bow passes between Rundle and Cascade mountains is no doubt due to several cross faults. These might be expected in this place, as this is the point at which there is a change in the direction of the mountain ridges, and one of the main breaks of this series is prolonged eastward through the Fairholme range, along which line the valley occupied by the waters of Minnewanka lake has been eroded. Stony Squaw and Tunnel mountains are but remnants from the great rock mass that formerly joined the two ranges to the north and south. Other cross faults are indicated in the gaps on both sides of the Bow valley near Canmore.

CASCADE MOUNTAIN SHEET.

The line of fault which starts east of Grotto mountain in the Canmore sheet is continued northward through the next cutting across Minnewanka lake, and has a displacement of about 6,000 feet throughout this sheet. The geology of the block that is let down on its eastern side is mapped northward to the vicinity of Mount Aylmer, but from that point for a few miles northward the colours are merely projected to meet the outlines as they were seen from the east branch of the Cascade river, north of the centre of the sheet, and changes may have to be made in the details.

A second and smaller fault, confined to the area represented on this sheet, cuts along the face of Palliser range and crosses the outlet of Minnewanka lake. It appears to die out in both directions, changing to folds with lessening displacement.



The great fault which forms the western boundary of the Cretaceous coal-bearing rocks through the area shown on both the sheets to the south is here deflected to the north by about twelve degrees, and, at the north end of Cascade Mountain ridge, is continued as a reversed fold with its axis dipping slightly to the north. This fold is broken across in several places by small cross faults—now weathered out to form diminutive valleys which divide the ridge into a series of small hills that maintain a general alignment. The first break at the end of Cascade mountain is illustrated in the sketch on page 13, and shows the remarkably sharp fold assumed by the quartzites and limestones.

In the block which fronts this range the coal-bearing beds are present, and are found along the east flank of Cascade mountain. They are rather high up the mountain side at the north end of the ridge. Beyond this the stream swings more to the west and the coal rocks disappear. The lower beds—the Fernie shales—continue, and come round the end of the ridge into the next depression to the west.

The next fault line west of Cascade mountain is a continuation of that which runs up the spray at Banff. It also makes a bend to the north similar to the change in direction of the fault in front of Cascade mountain. The change in direction also suggests a cross break, where the Bow valley cuts through this range. The Vermilion range seen from the east shows along its summit rocks of the Lower Banff limestone, with the yellowish beds of the Intermediate series forming the lower slopes. In discussing the faults through the country to the south this fault was given a throw of only about 6,000 feet. In the section of the Panther river the displacement is double this amount, and the lateral movement has been over 14,000 feet.

PANTHER RIVER SHEET.

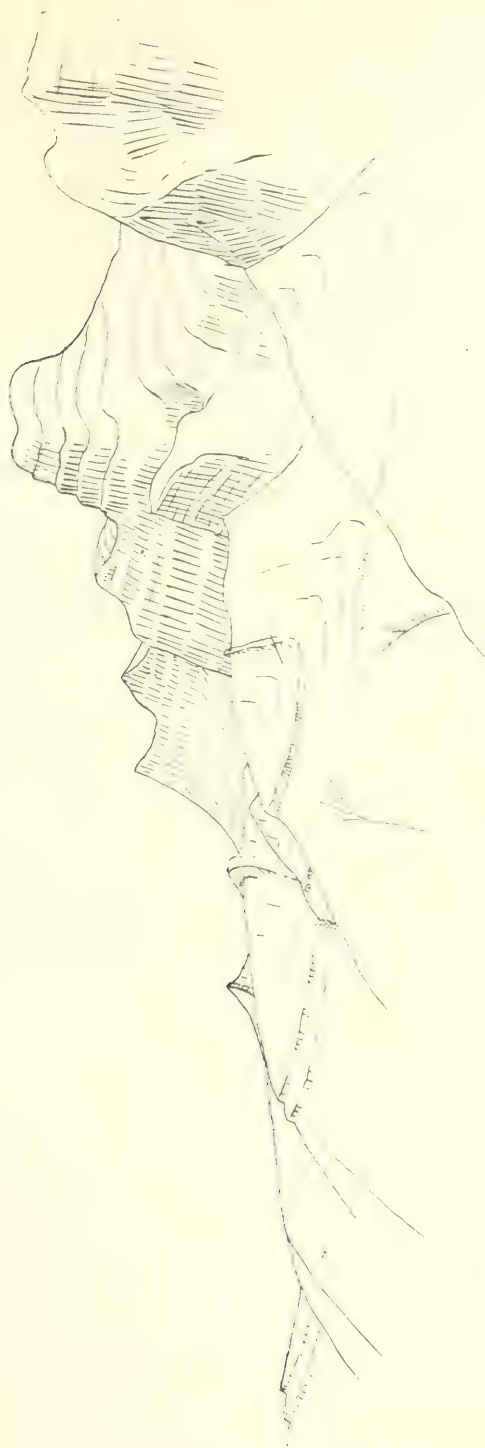
The eastern part of this sheet shows part of a block of westward dipping beds cut off by the fault that runs along the eastern edge of the Palliser range. The amount of displacement now shown by the present position of the beds is about 6,000 feet at the south edge of the sheet, but this increases to the north, and at the Panther river is about 8,000 feet. In this part, which is where the eastern block has sunk lower than at any other part, a basin of coal-bearing beds is found dipping toward the west. Eastward these measures rise in heavy folds, but have suffered great erosion. Remnants of the lower parts of some of these folds still remain, crowning the summits of the lesser hills that lie between the mountain ranges. The wider valley to the west between the Palliser and Vermilion ranges is floored with the Cretaceous and Jurassic rocks, which may be said to form a trough overlapped at the north by the thrust up rocks of the Vermilion range. In the centre of the valley the trough is shallow, so that the coal rocks are limited to the higher points, and these again are found to be badly folded, so that it would seem that but little of the area should be classed as economically valuable. In the northern part, where there appears to be an overlap, there seems to be some chance that the beds dipping to the fault line may continue for a sufficient distance to make them valuable.

On the section which is made to cross the centre of the sheet it will be noticed that at either edge of this basin the underlying rocks come up in trough form, but are bent down again to the west. In nearly every exposure along the lines of fault the heavy blocks seem to have been pushed up over the down turned edges of the rocks to the east of the line of break, with the exception perhaps of rocks west of Stony Squaw mountain, where there seems to have been an upturn toward the fault line.

THE WIND MOUNTAIN COAL-BEARING AREA.

The structure of the block illustrated on the Wind Mountain sheet is already briefly described. The coal-bearing rocks occupy a partly dissected plateau rising from the eastern face of this high mountain ridge. It is cut very deeply by the valley of the Kananaskis and a small branch from between Mount Kidd and Wind moun-

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WIND MOUNTAIN AND CRETACEOUS BEDS OF PLATEAU IN FRONT OF IT.

tain. The lower part of the coal measures, as seen in the Kananaskis valley, although they are cut by the fault—the dip of this fault plane being about 60° S.W.—is partly overridden by the thrust up limestone of the western side of the fault line. In the higher part of the coal measures, where these have not been removed, they are seen to have been bent back by the upward movement of the rock mass of the Wind Mountain ridge, and have thus formed a shallow trough. This structure, in the highest part of the plateau, can be seen from the Bow valley and even better from the top of nearer hills. The sketch submitted is from a hill just south of the Bow river and east of Three Sisters mountain. The trough form seems to be carried through all the high parts of the plateau, but in the valleys cutting west to the mountains the lower beds are carried quite near the fault line before being pushed up. To the north and south of this central area there is more of a tendency in the lower beds to dip downward as the fault line is approached, and it seems that there would be no good reason to compare the structure of the whole of this area to that of a trough. As many of the very promising coal seams are in the lower parts of the measures, these might reasonably be predicted to continue under these hills, dipping easily at the eastern edge to the west, but soon assuming a nearly horizontal position, which would be maintained to well in toward the fault line before being bent up. These seams could not, however, be expected to reach the surface again, as from the centre of the trough to the fault line there is not room for a return of all the beds beneath, and most of the pushed parts of the beds stop at the fault line.

South of the Kananaskis river the measures bear against limestone that has been very much crushed back and folded and faulted, so that they have been greatly denuded.

South of the hill called 'The Wedge' a gap is cut through and brings a stream from the south along the Cretaceous beds to join the Kananaskis, which occupies a parallel valley to the west. The southern extension of the Cretaceous, which lies south of the map sheet, is, therefore, greatly denuded, and is also divided by two synclinal folds with two narrow troughs that rise higher in the hills to the south, disappearing in very narrow strips in the mass of mountains behind those bordering the east side of the upper waters of the Kananaskis.

The northern part of the sheet drains to the Bow river from this plateau, and as access to it is not difficult the hills north from Wind mountain will probably be mined.

An old opening was made years ago on a seam which was uncovered in one of the gullies east of the Three Sisters, and which was found to be very good steam coal. The subsequent opening of mines nearer to the railroad discouraged this enterprise until greater demand arose. The gully in which this old mine is situated is very steep, and a section was measured in the next gully to the east as it was more accessible. The measurements are supplied by Mr. D. D. Cairnes, who made a careful examination of this section.



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Number.	SECTION.			CHARACTER OF COAL.			
				Moisture.	Volatile.	Fixed carbon.	Ash.
		Ft.	In.	p.c.	p.c.	p.c.	p.c.
1	Coal	2	6				
	Sandstone and shale	21	0				
2	Coal	3	0				
	Sandstone and shale	76	0				
3	Coal	3	6				
	Sandstone and shale	94	0				
4	Coal	15	6	3.5	13.1	77.9	5.5
	Sandstone	10	0				
6	Dirty seam coal	10	0	2.6	12.4	81.2	3.8
	Sandstone	35	0				
7	Coal	4	0				
	Sandstone	70	0				
8	Coal	1	6				
	Sandstone	12	0				
9	Coal	4	6	1.0	12.5	78.0	8.5
	Sandstone	7	0				
10	Coal	1	6				
	Sandstone and shale	8	9				
11	Coal, mixed with shale	6	0				
	Sandstone	3	0				
12	Coal	1	0				
	Sandstone and shale	16	0				
13	Coal, dirty	3	0				
	Sandstone	53	6				
14	Coal	3	6				
	Sandstone and shale	20	0				
15	Coal, dirty	2	6				
	Sandstone	27	0				
16	Coal	1	0				
	Sandstone and shale	6	0				
17	Coal	0	6				
	Sandstone	15	6				
18	Coal	4	0	2.5	11.5	78.5	7.5
	Sandstone, streaks of coal	76	0				
25	Coal, probably upper Marsh seam	8	0				
	Sandstone and shale	66	0				
26	Coal	2	0				
	Sandstone	16	0				
27	Coal	1	6				
	Sandstone	29	0				
28	Coal	6	0				
	Sandstone	10	0				
29	Coal	7	0				
	Sandstone	53	0				
	Sandstone, streaks of coal	67	0				
32	Coal	2	0				
	Sandstone and shale	10	0				
33	Coal	4	6	2.5	9.5	83.5	4
	Sandstone	12	0				
34	Coal	2	0				
	Sandstone and shale	9	0				
35	Coal	1	0				
	Shale	20	0				
	Sandstones and shales	100	0				
39	Coal	5	0				
Coal seams four feet and over.		1048	6				
		10					

CANMORE COAL-BEARING AREA.

Reference to the Canmore sheet shows the coal-bearing rocks to form a narrow band stretching the length of the sheet and occupying about the middle. This represents beds nearly all dipping to the west and probably cut off at the fault line, the plane of which dips to the west about 60 degrees.

A line south through Anthracite will about follow the trough of a large fold which lessens to the north but broadens out and descends toward the south. The beds come up nearly vertical before turning down again, and at the point indicated by the northern edge of the sheet they are all dipping to the west again. Southward from this fold there is probably a distance in which these westward dipping beds are not otherwise disturbed, but as Canmore is approached a series of minor folds are encountered that have been discussed in the chapter on the physical structure of the region. The southeastern limit of this series appears to be at the base of the small plateau north of Three Sisters mountain, and the limiting line can roughly be given as running north and south just to the east of Canmore. The beds east of this line are lying in a rather flat trough, the western edge, in the higher parts at least, turning upward toward the fault line as though pushed up by the over-ridden beds to the west of the fault line.

Openings have been made on the coal seams of this area in several places and extensive mines have been in operation, though, at the present time, mining is confined to the vicinity of Canmore. The mine at Anthracite from which a considerable amount of hard coal has been taken is at present closed. The old Cochrane mine at Canmore is closed, though the measures will probably be tapped by the workings at the Canmore mine a short distance to the south. The Canmore mine is situated at a gully west of the town, and another auxiliary opening has lately been made a mile to the south in order to add to the output. Our knowledge of the measures has been gleaned mainly from the workings of the mines, and notes relating to them are here introduced.

CANMORE MINE.

The main openings are in a small gully on the west side of the Bow river near the town of Canmore. The first mine in this neighbourhood—the Cochrane mine—was opened on the same side about a mile farther up the river, and a spur to it was made from the railway. When it was closed down and the openings for the present mine were made the spur was continued down the west side of the river. Another opening is now being put in a mile southeast of the Canmore mine on an outcrop called the Sedlock seam, and the railway spur is being continued to it. This will considerably increase the output of the mine without taxing the plant in operation at the main slope. The workings are generally towards the south from the main slope, but some mining has been done toward the northwest. The abandoned workings of the Cochrane mine, records of which do not appear to be available, are a great menace if they happen to be on the same seams, as they are full of water.

The coal measures outcrop along a small stream that comes from the gap leading to the White Man pass. Several seams outcrop, and on No. 2 a slope has been put down. A section along this part of the creek would give the impression that the measures occur in a series of waves sharpening to the west, and that probably the same bed was repeated. The section given in the mine shows that the beds are crumpled in a series of waves, but that the general dip of the seams is about 50 degrees toward the Rundle range. The waves along the beds seem to be the result of the pressure and partial over-riding of the mountain mass from the west. That this pressure was not at right angles to the line of faulting is shown by the fact that the waves do not run with the line of strike but pitch downward toward the south. This feature is discussed in the chapter on the general structure of the region.

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The workings are on six seams, with a slope on No. 2 seam which reaches a depth of over 600 feet. The general section, with the several coal seams, is given in the following summary, commencing at the highest seam:—

- Seam No. 6.—Coal, 4' 6", with a small shale parting in the middle.
Rock, 245'.
Seam No. 5.—Coal, 5' 3", soft and broken.
Rock, 30' to 100'.
Seam No. 4.—Coal, 3' 1", generally bright and clean.
Rock, 25'.
Seam No. 1.—Coal, 5' 8", with 8" slate.
Rock, 40'.
Seam No. 3.—Coal, 5'.
Rock, 15'.
Seam No. 2.—Coal, 4'.

Detailed sections of each seam, and analyses of the coal from various points in the mine, as far as could be obtained, are here given:—

Seam No. 6.—This is reached by a tunnel from No. 5, is the highest of the series mined and was the last to be prospected. The horizontal distance from No. 5 is reported as 350 feet. The seam has 4' 6" bright coal, with a small parting in the centre, and from a sample obtained twenty feet from the surface appears to be very clean. An analysis of a small sample supplied by Mr. A. Stewart was made in the laboratory of the survey by Mr. F. G. Wait, and gave the following results:—

Moisture.	0.49
Volatile combustible matter.	16.04
Fixed carbon.	81.14
Ash.	2.33
	100.00

Seam No. 5.—This is a crushed seam in many parts, and suffers pinching out where the curves or waves in the plane become sharpened up. The coal thus crowded out helps to swell the thickness in the other parts, so that in following the workings an increase in thickness is generally succeeded by a sudden decrease. On one of the gangways along this seam to the north of the hoist a thickness of twelve feet was attained, but in a short distance this diminished to a few inches, and often the seam is lost altogether for a short distance. The following analysis, which is supplied by the mine operators, will give a general index of the character of this coal:—

Moisture.	1.10
Volatile matter.	14.66
Fixed carbon.	78.38
Ash.	5.20
Sulphur.	0.66
	100.00

Another sample submitted to the Trail smelting works and analyzed by R. T. Wales is much harder and has less ash:—

Moisture.	2.00
Volatile combustible matter.	12.90
Fixed carbon.	82.40
Ash.	2.70
	100.00

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This last sample is no doubt taken from the unbroken and more compact parts of the seam. Experiments in washing this coal showed that most of the ash was in the finer particles or in the softer portion of the seam, and therefore harder to get rid of. In some of the other seams there is a large amount of slate, but this is easily picked out. As No. 5 is an easily worked seam the tendency is to put as much of this soft coal as possible in the output, but the amount of ash in the fine coal was against it. A washing plant has been installed, and it is possible that the general high grade of the coal will be maintained.

Seam No. 4.—The section where this seam outcrops in the creek at the mines shows a dip of about 65 degrees. Small bands of slate are in the seam, but there is 3' 1" of clean coal. The analysis of the weathered coal is:—

Moisture.. . . .	1.25
Volatile matter.. . . .	13.52
Fixed carbon.. . . .	81.30
Ash.. . . .	3.47
Sulphur.. . . .	0.46
	100.00

In the mine the coal appears to be of the same character. From north of the hoist the analysis gives, for dried coal:—

Volatile matter.. . . .	13.00
Fixed carbon.. . . .	84.50
Ash.. . . .	2.50

South of the hoist another sample gives:—

Volatile matter.. . . .	13.8
Fixed carbon.. . . .	82.2
Ash.. . . .	4.0

Seam No. 1.—The coal in this seam is pretty well split up by shale partings, but they are readily separated out, and the coal is of fair quality. The section here given is in descending order at a point 100 feet southeast of the main slope:—

Roof, sandstone.	
Slate.. . . .	0' 3"
Coal.. . . .	0' 6"
Mining.. . . .	0' 6"
Coal.. . . .	1' 6"
Mining.. . . .	0' 1"
Coal.. . . .	0' 9"
Mining.. . . .	0' 2"
Coal.. . . .	2' 3"
Mining.. . . .	0' 1"
	5' 8"

Analysis by R. T. Wales:—

Volatile matter.. . . .	12.6
Fixed carbon.. . . .	83.4
Ash.. . . .	4.0

The seam is pinched out to a few inches in the tunnel at the foot of the main slope, and to determine whether this extra crushing had hardened the coal a sample was analyzed by Dr. Hoffmann, but the results are negative:—

Moisture.. . . .	0.43
Volatile matter.. . . .	15.10
Fixed carbon.. . . .	81.74
Ash.. . . .	2.73

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Seam No. 3.—Section in gangway north of main hoist:—

Roof, sandstone.

Coal.. . . .	2' 3"
Slate.. . . .	0' 3"
Coal.. . . .	2' 10"
Mining.. . . .	0' 2"

Floor, sandstone.

Analysis by R. T. Wales:—

Volatile matter.. . . .	11.8
Fixed carbon.. . . .	84.4
Ash.. . . .	3.8

Seam No. 2.—This is the lowest seam worked. Others below this have been prospected but are not clean enough. Several sections at different points in the mine are furnished by the manager, Mr. O. E. Whiteside:—

Section No. 1, 100 feet northwest of tunnel, upper lift—

Good coal.. . . .	0' 6"
Slate.. . . .	0' 2"
Fair coal.. . . .	2' 8"
Shale.. . . .	0' 8"
Coal.. . . .	0' 1"
Slate.. . . .	0' 2"
Coal.. . . .	0' 5"
Slate.. . . .	0' 2"
Coal.. . . .	1' 0"
	5' 10"

Section No. 2, 50 feet southeast of tunnel, upper lift—

Coal.. . . .	0' 6"
Slate.. . . .	0' 2"
Sandy coal.. . . .	2' 6"
Slate.. . . .	0' 9"
Coal.. . . .	1' 2"
Slate.. . . .	0' 0½"
Coal.. . . .	1' 7"
	6' 8½"

Section No. 3, 60 feet northwest of rock tunnel from No. 1 to No. 3, lower lift—

Roof, slate.

Fair coal.. . . .	0' 10"
Sandy coal.. . . .	2' 4"
Slate.. . . .	1' 2"
Extra coal.. . . .	1' 6"
	5' 10"

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Section No. 4, northwest of second tunnel, lower lift—

Mining.. . . .	0' 11"
Coal.. . . .	1' 7"
Mining.. . . .	0' 7"
Slate.. . . .	1' 2"
Coal.. . . .	0' 8"
Slate.. . . .	0' 1"
Coal.. . . .	0' 6"
Slate.. . . .	0' 2"
Coal.. . . .	0' 6"
Slate.. . . .	0' 0½"
Coal.. . . .	0' 3"
	6' 5"

Section No. 5, southeast of second tunnel, lower lift—

Bony coal.. . . .	0' 6"
Mining.. . . .	0' 3"
Slate.. . . .	0' 0½"
Coal.. . . .	1' 5"
Slate.. . . .	0' 0½"
Mining.. . . .	0' 7"
Slate.. . . .	1' 6"
Coal.. . . .	0' 6"
Slate.. . . .	0' 3"
Coal.. . . .	0' 6"
Slate.. . . .	0' 0½"
Coal.. . . .	0' 11"
	6' 6½"

One analysis by R. T. Wales, of the Canadian Smelting Works, Trail, B.C., is given for coal from this seam, but the locality is not recorded:—

Volatile matter.. . . .	14.7
Fixed carbon.. . . .	79.0
Ash.. . . .	6.3

Sedlock Seam.—One other seam is being opened along the bank of the Bow river a mile southeast of the mine. This is to the east of the outcrop of the seams in the mine, and appears to be on the eastern edge of the crumpled area. The main part is in a broad, shallow trough, with the eastern edge upturned to nearly vertical, and outcropping along a nearly straight line running southward. The trough broadens to the south and for the most part it is supposed that the coal will be about horizontal. If the outcrop of the western upturn be followed southward into higher ground there is reason to suppose that it will be found to curve back and join some of the seams of the mine. If a connexion can thus be made with the mine a saving in underground haulage will be made.

The character of the coal in this seam is very like that of No. 4, but it is somewhat thicker in section.

Coal.. . . .	0' 5"
Slate.. . . .	0' 2"
Coal.. . . .	0' 3"
Slate.. . . .	0' 1"
Coal.. . . .	4' 6"
Mining.. . . .	0' 1"
	5' 6"

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Analysis by St. Louis Sampling Works:—

Moisture.....	0.93
Volatile matter.....	12.78
Fixed carbon.....	82.99
Sulphur.....	0.75
Ash.....	2.55
	100.00

Analysis by M. O. Hersey:—

Moisture.....	0.04
Volatile matter.....	14.03
Fixed carbon.....	82.11
Sulphur.....	1.07
Ash.....	2.82
	100.00

The general section of the seams in the mine as given above is a rough approximation only. The general dip of the seams is about 50 degrees toward the mountain range to the west of the valley. A series of folds runs along the plane of the seam, and have a pitch of about 20 degrees toward the south. Where these folds cross the main gangways the plan of these latter show curves, and in the case of the larger folds the curves are reversed like S. On the sharper parts of the curves the coal is often pinched out.

There are scarcely any faults in the measures. Nearly all the trouble in following the seams arises from the presence of these crushed folds.

The coal is raised from the first two levels on a double track slope on No. 2 seam. The first level is 130 feet below the mouth of the slope, and the opening to it from the slope is by a short tunnel to No. 4 with a sort of drawbridge that is let down on to the tracks of the slope when cars from this level are to be raised.

At the second level, which is the one from which most of the coal comes, 340 feet below the mouth of the slope, the tracks cross each other through a narrow opening, so that in the event of an accident to the cable or coupling the runaway car leaves the track at the curve and strikes the bulkhead. This simple device seems to be very effective, as no serious accident has occurred since its installation.

The first fold that is encountered crosses near the foot of this slope, and the seam is pinched out to a few inches. Another fold follows at about 500 feet along the gangway to the southeast, causing a deflection in the plan of the roadway. At this turn the cars of coal from the lower or third level are hauled up a slope that runs along the bottom of this trough. A compressed-air engine with winding machinery is installed on the second level at the head of this second slope. The vertical lift from the third level to the second is 216 feet.

Southeastward from the main hoist, for nearly a mile, the measures are quite regular, but at this distance a fold is again encountered, and the gangways all curve more or less sharply round the saddle and trough through all the beds. As might be expected, the lower beds under the trough and the upper ones over the saddle have easier curves, and there is less pinching out of the coal. The sharpness of the curves also decreases as the trough is followed downward.

GAS IN THE MINE.

Although the coal is a semi-anthracite, and not inclined to be gassy, there still seems to be pockets or small reservoirs of gas that, when tapped, are dangerous. These blow-holes do not last very long, but practically close up portions of the mine for a time. They are encountered in the rock tunnels as well as in the coal seams, and may be on the lines of crushed out coal seams. Safety lamps are used with every caution.

and accidents are not frequent. The ventilation is by means of several fans driven by steam.

Extracts from 'Reports on the efficiency of various coals used by the United States ships, 1893-95,' Bureau of Equipment, Washington, 1895, pp. 26-27:—

'Thirty tons of Canmore steam coal were received for test at Vancouver, British Columbia. About one half of it was fine coal, the rest consisting of small lumps with the admixture of a small percentage of bigger lumps of the size of 4 to 6 inch cube. It resembles in appearance English Cardiff coal; also its chemical composition, according to H. W. McNeill's table, is similar to that of the mentioned coal, having a little less percentage of fixed carbon and a little more of volatile matter than Cardiff coal. Its calorific quality is superior to that of the Cardiff, and it burns out quicker. Like the Cardiff, it burns with no smoke, and is a semi-bituminous coal. It makes a small hard clinker which does not adhere to the grate bars, and it does not coke in the furnace. The percentage of ashes is small, and less actually than given in the table, as some of the fine coal fell through the interstices of the grate bars, thus being unable to give out any heat, but increased the ratio of the refuse. The tubes were not in need of sweeping during the three tests. The ashes appear of a light greyish colour, with yellow streaks.....'

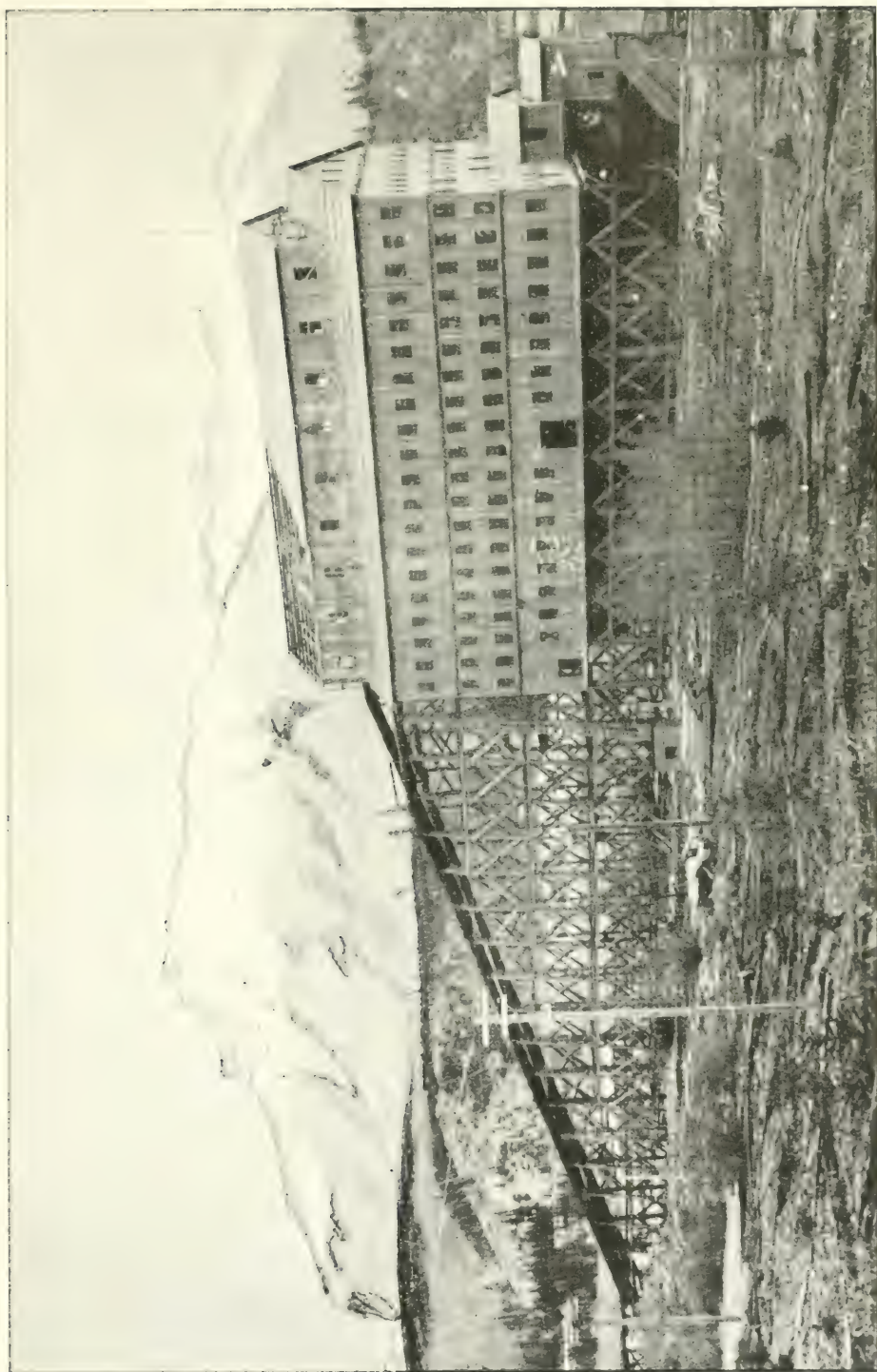
Analysis at Navy Yard, Washington, D.C.:—

Moisture.....	0.730
Non-combustible volatile matter.....	0.370
Combustible volatile matter.....	9.716
Fixed carbon.....	86.367
Sulphur.....	0.141
Ash.....	2.676
Phosphorous.....	0.007

Extracts from table of results from boiler tests on United States steamship *Mohigan*:—

TABLE OF DEDUCTIONS.

Name of Coal.	REPORTED.			Calculated Knots per ton of Coal.
	Horse power.	Coal burned per hour.	Coal burned per H. P. per hour.	
<i>Speed 50 revolutions approximately.</i>				
		Lbs.	Lbs.	
<i>Canmore</i>	644	2,133	3.31	10.0
Blue Canyon Washington.....	649	2,237	3.44	9.6
Navy Washington.....	739	3,056	4.133	8.0
New Vancouver Nanaimo.....	702	3,021	4.302	7.7
<i>Speed 40 revolutions approximately.</i>				
Blue Canyon.....	391	1,219	3.11	15.1
<i>Canmore</i>	396	1,234	3.12	15.1
New Vancouver.....	362	1,137	3.137	15.0
Navy Washington.....	357	1,442	3.98	12.0
<i>Speed 30 revolutions approximately.</i>				
Navy Washington.....	195	782	4.00	18.9
<i>Canmore</i>	180	763	4.23	17.9
New Vancouver.....	181	803	4.425	17.1
Blue Canyon.....	178	830	4.66	16.0



Anthracite Coal Mine.

The first coal seam located in this district was on the Cascade river nearly opposite the present mine at Bankhead. When the measures were found in a gully near the railway mining operations were commenced at what is called Anthracite. A slope was put down on the first seam, and several other seams were discovered above and below. The coal was very free from ash and had a high percentage of fixed carbon, so that it was classed commercially as anthracite.

The output was never very large owing to the restricted demand during most of the time that this mine was in operation. That the coal is so hard may probably be caused by the great pressure to which it was subjected—partly on account of the great throw of the fault and a possible overriding of the measures by the rocks of the mountains to the west, but also to the presence here of a great fold similar in structure to those at Canmore but of greater dimensions. This fold occurs just in the deflection angle made by the change in strike of the measures—that is, between the direction of the strike along the Bow valley and the production south of the strike of the northern portion up the Cascade valley, making an angle of 12 degrees.

An opening was made in a small gully to the east of the Cascade river, and mining operations were commenced on beds dipping down into this fold. On account of the great denudation of the valley of the Cascade river, filled in again by gravel deposit, the beds could not be safely followed down through the trough and over the saddle to the far side without running into the water-laden gravel of the river. In the northern part of the mine where the trough was shallower the western upturn showed a slight bending to the west, and this, if it could have been followed far enough, would have led down into the seams that are on the northern part of the property.

The sandstones below the coal can be traced northward to cross the Cascade river, and it seemed rational to suppose that the coal seams should follow the same direction.

The mining operations were continued only long enough to extract the coal from the seams within the fold, and little prospecting was done on the northern and larger part of the property. The mine was robbed of its pillars in 1904, and all the plant was removed. The particulars of the thickness of the seams and their relation to each other should be preserved, and a condensed statement is here added.

The workings were carried out on two levels, with a counter above the upper one. The depths below the mouth of the slope are: Counter, 120 feet; 1st level, 270 feet; second level, 435 feet. The slope is on seam No. 1.

Five seams were worked, having the following relation to each other, beginning at the highest:—

Seam B—Coal, about.	4' 4"
Rock.	85' 0"
Seam A—Three small seams.	7' 0"
Rock.	75' 0"
Seam No. 1—Two small seams.	4' 0"
Rock, about.	75' 0"
Seam No. 2—.	2' 2"
Rock.	30' 0"
Seam No. 3—.	3' 4"

Sections of the Seams.

Seam B, 100 feet south of tunnel—

Mining.	1' 0"
Slate.	0' 7"
Coal.	4' 4"
Mining.	0' 6"

Seam A, at top of new slope—

Mining.	0' 3"
Coal.	1' 0"
Slate.	0' 1½"
Coal.	4' 9½"
Mining.	0' 2"
Rock.	1' 6"
Coal.	2' 10"
Mining.	0' 4"
Total coal.	8' 7½"

Analysis of coal from seam A:—

Volatile matter.	7.65
Fixed carbon.	88.72
Ash.	3.63
	100.00

Seam No. 1, section in tunnel—

Roof, shale.	
Bone.	1' 3"
Coal.	2' 0"
Bone.	0' 2"
Coal.	0' 5"
Slate.	0' 2"
Mining.	1' 2"
Slate.	0' 1"
Coal.	0' 5"
Slate.	0' 4"
Coal.	1' 2"
Mining.	0' 2"
Floor, slate.	

Seam No. 2, in tunnel—

Roof, hard shale.	
Coal.	2' 2"
Shale.	0' 4"
Mining.	0' 6"

Seam No. 3, in tunnel—

Roof, slate.	
Mining.	0' 10"
Coal.	1' 2"
Slate.	1' 0"
Coal.	2' 2"
Bed, sandstone.	

Northwest of the mine near the railway bridge three seams were opened in the hillside. These are probably some of the upper beds that are to the west of the fold. They are the only ones prospected west of the mine, and had they been of better character there is no doubt that extensive mining would have followed, but as they were dirty work on them was soon stopped.

Drifts were run in on the upper and lower seams. The upper one is the heavier, but is cut up by many slate partings, as will be seen in the two sections below:—

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Upper seam section at outcrop—

Mining and slate.	0' 9"
Coal.	1' 5"
Slate.	0' 2"
Coal.	2' 2"
Slate.	0' 2"
Coal.	2' 3"
Slate.	0' 0½"
Coal.	0' 11"
Slate.	0' 1"
Coal.	0' 4"
Slate.	0' 5"
Coal.	0' 5"
Total coal.	7' 6"

Section in drift, 62 feet—

Mining and slate.	0' 7"
Coal (good).	1' 0"
Slate.	0' 3"
Coal (partly sandy).	4' 9"
Mining (some streaks of coal).	1' 9"
Total good coal.	5' 9"

Lower seam, section at outcrop—

Mining.	1' 6"
Coal.	3' 10"
Slate.	0' 2"
Coal.	0' 10"

CASCADE MOUNTAIN COAL AREA.

Along the face of the Cascade mountain a heavy block of Cretaceous rocks dips to the west toward, and apparently under, the limestones. In several of the small gullies running down from the face of the mountain coal seams were found and prospected for the Pacific Coal Company. They are now being mined from the south end of the ridge, where it is cut by the Cascade river nearly opposite the point where the first discovery of coal was made. The numerous seams prospected on the face of the slope have not all been traced as far as the crossing of the Cascade, but two strong ones near the bottom of the measures were traced from Creek No. 4 south, and, as before mentioned, temporary entries were made on them. A permanent entry by a long tunnel through the gravel of the lower part of the valley is now in operation, starting from near the level of the Cascade river. This point is 186 feet below the temporary entry, or 234 feet if measured along the pitch of the seam. This lower level for the entry adds considerably to the amount of coal above the haulage way. Another advantage is the easier access for a railway spur from the main line. A suitable location for shops is found here, and an extensive plant, consisting of breaker, boiler-house and machine shops, has been put in operation. The haulage in the mine will be by compressed-air motors.

References to the progress of the work and notes on the measures will be found in the Summary Report for the following years: 1903, p. 90; 1904, p. 113, and the Summary for 1905.

The southern end of this field consists of a monoclinical block of Cretaceous rocks dipping to the west, partly over-ridden by the limestone of Cascade mountain. This overthrust has made some impression on the rocks composing the block. The two

lower seams on which work is progressing are well protected by heavy beds of sandstone and the shearing and pressure of the overthrust have caused little damage to the coal. The one above has suffered much more owing no doubt to weaker covering beds, and there is evidence that there has been sliding and bending of the overlying rocks. The sliding plane seems to have been mostly along the plane of this coal, which is seam No. 2½. In the beds immediately under the mass of the mountain little crumpling could take place, and they must have slid bodily or in sections at different planes. In the beds at a distance from the overlying mass less sliding took place, and the consequence is that there has to be a crumpling of the upper measures, a sort of gathering or pleating (to use a homely phrase) of the beds in front of the load. The rolls thus made would at the sliding plane be filled with broken material, and there would be a local thickening of the series along the face of the overthrust mass. The folds at Canmore are formed in somewhat the same way.

The bulging in this seam was noted at several places. In the prospect work at the top of the hill, half a mile north of the mine, No. 2 seam showed 100 feet of crumpled coal. This was found to occupy a triangular section—the foot wall being at about the normal slope, but the roof nearly vertical. A short distance below the seam had about five feet of coal. In a cross-cut to this same seam at the temporary entry on No. 2 seam the rocks were apparently undisturbed to near No. 2½, when the dip increased and the seam was found standing about vertical. Farther on the dip reversed, and, where work stopped, the rocks were nearly horizontal. This points to a possibility that this tunnel passes beneath another of these rolls or pockets of broken coal. The foot wall of the seam was smoothed and showed small horizontal ridges as though from the lateral pressure. Another example of buckling in the beds was observed on the walls of a gully five miles north of this place. This is probably in measures slightly higher in the series than this seam, and, if so, there is a chance that farther in on the measures workable parts may be found on this crushed seam.

The effect of this buckling on the coal above the plane of sliding will be to form waves as at the Canmore mine. Other sliding planes may, however, be encountered, but they are as apt to be in the shale beds as in the coal seams, and may not cause very much damage.

Bankhead Mine.

The development so far at Bankhead has disclosed in the lower part of the measures three very regular and little disturbed coal seams, a smashed portion of another, and in the cross-cut four very heavy seams above. The lower seams are nearly as hard as at Anthracite, but from the samples taken from the outcrops of the higher seams along the hillside softer coal will probably be found, and after the cross entries are finished the shipments may include anthracite and steam coal. The mining at Anthracite is all from a lower level than that at Bankhead, so that the difference in fixed carbon in the coal from the two localities may be due to this difference in level.

There seems good reason to suppose that part of this field was over-ridden by the limestone of Cascade mountain as well as a portion to the south which is now opposite the gap between Rundle and Cascade mountains probably to past Anthracite. One reference that points to this conclusion will be mentioned before giving details of the coal seams at Bankhead. A seam just under the foot of the mountain was prospected by a short slope which followed it down for one hundred feet. The seam started at the normal dip of 45 to 50 degrees, but was found broken in several places by faults running along in front of the mountain which carried the seam down so that from the bottom of the slope to the top the dip was nearly 80 degrees. This would tend to show that the part in the slope was just in front of the load, and the breaks the result of this immense weight. Beneath the load there would be less chance for folds, but on the sliding planes where these happen to be on coal seams the destruction would be carried far, though, in the unloaded portion this gradually becomes less, and the amount of displacement also decreases by reason of the folding giving relief.

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A thickening of the measures in the unloaded part from the bending in the beds is also shown in the change of dip at the foot of the mountain.

DETAILS OF THE SEAMS.

The manager, Mr. D. Stockett, very kindly furnished the details regarding the seams in the mine as shown by the cross-cut.

As work on this cross-cut tunnel is still in progress the details are complete only for the seams enumerated below. The beds are cut at an angle of about 45 degrees, so that the distances in the tunnel have to be reduced to show the horizontal distances between the seams, and then, from the dip of the beds, the thickness of strata can be ascertained.

From the highest seam then opened (No. 6), for which no details are given, the distance in this cross-cut tunnel to the next below, No. 5, is 173 feet, representing a horizontal distance of 122 feet at right angles to the strike. As the dip of the seam is here 30 degrees, this represents a thickness of 61 feet of strata between the seams.

Seam No. 5, dip 30 degrees:—

Coal.....	6' 0"
Sandstone and slate.....	3' 0"
Coal.....	0' 3"
Slate.....	0' 4"
Coal.....	0' 7"
Slate.....	0' 9"
Coal (dirty).....	0' 11"

Horizontal distance between No. 5 and No. 4 seams, 120 feet; thickness of beds, about 60 feet.

Seam No. 4, dip 20 degrees:—

Coal.....	6' 0"
Mining.....	1' 3"
Coal.....	3' 0"
Sandy slate.....	2' 6"
Coal.....	4' 6"

Three hundred and sixty feet horizontally through sandstones to seam No. 3. The perpendicular distance between these seams is not as great as this distance would indicate, as there is some folding in the beds between.

Seam No. 3, dip 50 degrees:—

Roof, sandstone.	
Slate.....	1' 0"
Coal.....	10' 0"
Mining.....	0' 6"
Coal.....	4' 0"
Sandy slate.....	5' 0"
Coal.....	5' 0"
Sandy slate.....	2' 0"
Slate.....	0' 8"
Coal.....	0' 4"
Slate.....	1' 0"

One hundred and thirty-two feet horizontally through sandstones to seam No. 2. This represents about 92 feet of beds.

Seam No. 2, dip 50 degrees:—

Slate.. . . .	0' 6" to 1' 6"
Coal.. . . .	1' 0" 1' 3"
Mining.. . . .	0' 4" 0' 6"
Coal.. . . .	8' 0"
Sandy slate.. . . .	1' 4"
Coal.. . . .	0' 2" to 0' 4"
Sandstone.. . . .	2' 0"
Coal.. . . .	0' 3" to 0' 4"
Sandstone.. . . .	3' 0" 4' 0"
Coal.. . . .	1' 6"

Analysis of specimen from entry at B level.

Moisture.. . . .	0.43
Volatile combustible.. . . .	10.65
Fixed carbon.. . . .	85.02
Ash, white.. . . .	3.90
	100.00

Forty feet horizontally through sandstone to seam No. 1, about 30 feet of beds.

Seam No. 1, dip 50 degrees:—

Slate.. . . .	0' 6" to 0' 10"
Coal.. . . .	4' 0"
Mining.. . . .	1' 0"
Coal.. . . .	1' 6"
Sulphurus.. . . .	0' 1" to 0' 3"
Coal.. . . .	1' 0"
Slate.. . . .	0' 4" to 0' 6"
Coal.. . . .	1' 0"
Slate.. . . .	1' 0"
Coal.. . . .	0' 2" to 0' 3"
Slate.. . . .	1' 0"
Coal.. . . .	0' 3" to 0' 4"

Forty-four feet horizontally to seam No. 0.

Seam No. 0, dip 50 degrees:—

Sandy slate.. . . .	0' 7"
Coal.. . . .	0' 2"
Sandy slate.. . . .	1' 2"
Coal.. . . .	0' 4"
Slate.. . . .	0' 6"
Bony coal.. . . .	0' 6"
Coal.. . . .	2' 6"

The measures in which these seams are found constitute a block dipping to the southwest toward the Cascade mountain. At the south end they seem to go under the limestones. At the north end the measures are bent up in an evident syncline, and the bottom of the measures are cut off at such an elevation that beyond where the valley is eroded nearer to the Cascade mountain the beds are entirely cut off.

A section measured near the mine at Bankhead gives a total of 2,800 feet as the thickness of possible coal-bearing rocks, with 550 feet of thin bedded brown sandstones and shales above them. The measures consist of sandstones and shales of a generally brown colour, and, in this vicinity, three strong sandstone ridges forming an upper and lower rib with one in the centre. These upper and lower ribs seem to define the limits of the coal formation. Below, a series of sandstones and shales very like those above the coal measures have a thickness of 1,100 feet. The passage to the Fernie

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shales is conformable, and is marked by the absence of sandstone. The Fernie shale consists of 1,360 feet of dark grey to black shale overlying 210 feet of dark greyish thin sandstone, the whole of marine origin and assigned to the Jurassic period.

The sandstone rib below the coal measures is a fairly well marked feature of all the sections of the Cretaceous of the area, and is about the only means of tracing the measures up the valley of the Bow river. In the area between the Cascade and the Panther river these appear in the higher points toward the centre of the valley, showing the shallow nature of the coal areas there.

Sections in the gullies on the east face of Cascade mountain.—Natural exposures of the stronger measures are found in the gullies running from the face of the mountain, but to test the coal seams prospecting work was undertaken on nearly all these gullies. On a creek about three miles north of the present mine fourteen coal seams were uncovered in the upper 500 feet of the measures. This stream was called Coal creek, and the gullies north and south of this were given numbers. The prospecting was continued north to Creek No. 10 and south to Creek No. 6.

On Creek No. 5 south the temporary drifts or entries on the two lower seams at what is now B level were started. There were no exposures, but the seams were traced by Mr. Gwillim from exposures on Creek No. 4.

Section of Measures on Creek No. 3 North.

Measurements along creek bed:—

Upper sandstone rib.

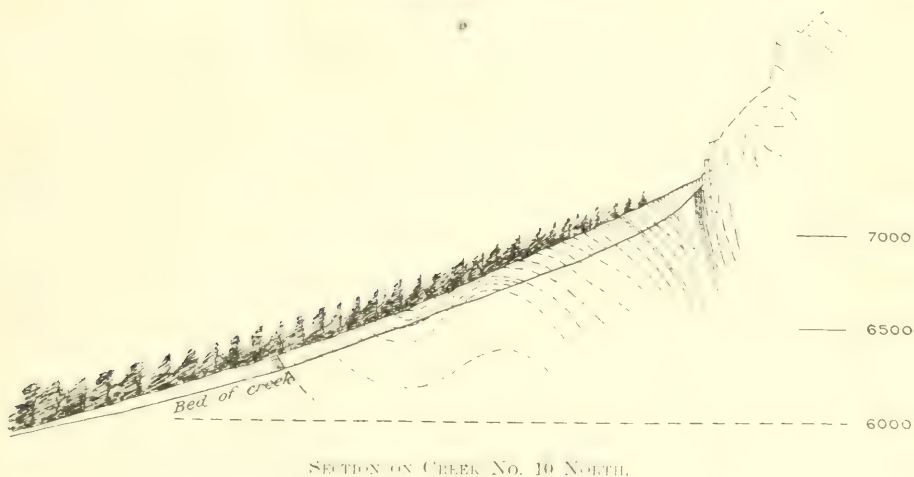
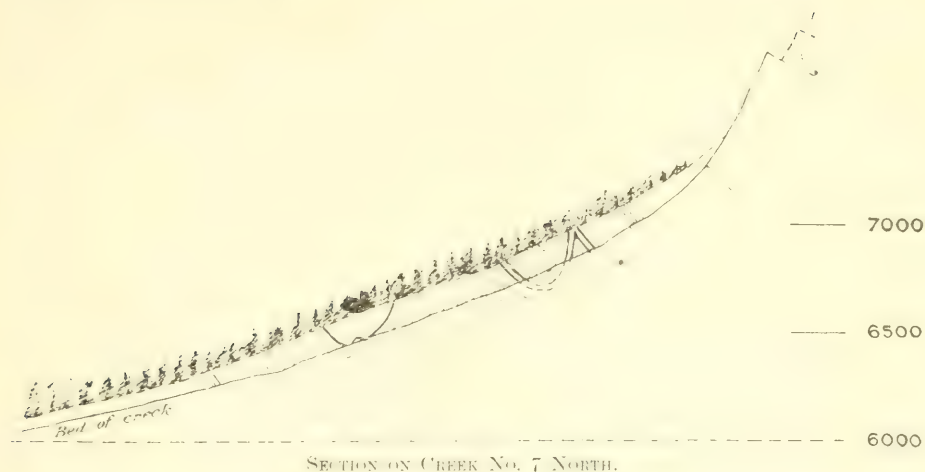
Thin bedded sandstone.		20 feet
Seam, dip 55°, shattered coal.	6' 0"	
Sandstone and shale.		130 "
Seam G, tunnel caved in.		
Sandstone—at 100 feet, dip 35°.		178 "
Broken coal and grey slate.		
Unexposed.		114 "
Hole in bank with some coal dust and rock.		
Unexposed—at 50 feet grey sandstone vertical. .		105 "
Small tunnel on vertical seam of coal.	5' 0"	
Unexposed.		42 "
Seam of dirty coal.	2' 0"	
Unexposed.		40 "
Vertical seam of coal.	4' 6"	
Unexposed.		50 "
Coal seam nearly vertical.	4' 9"	
Unexposed.		66 "
Open cut showing broken coal, about.	3' 0"	
Unexposed.		44 "
Open cut showing broken coal.	2' 0"	
Covered.		100 feet
Coal seam.	13' 0"	

Same seam is repeated farther down the creek by an anticline in the beds and an abrupt upturn. At the distance stated above there is a tunnel on the broken coal and a cross-cut in coal for forty feet along the bottom of the upturn.

Unexposed. 342 "



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Coal.. . . .	1' 0"	
Slate.. . . .	0' 6"	
Coal.. . . .	0' 6"	
Slate.. . . .	0' 5"	
Coal.. . . .	3' 0"	
Covered.. . . .		51 feet.
Coal seam 5' 5", with yellow sandstone nodules in centre.		
Covered.. . . .		31 "
Tunnel on coal seam.. . . .	6' 0"	

This has been run in about 50 feet, and shows about 6 feet of coal, to a sandstone rib, a distance of 144 feet. There are two coal seams below this at about 400 feet, near which point is, possibly, the lower sandstone rib.

Creeks Nos. 4 and 5 north have few exposures, but several of the seams noted on No. 3 have been found. As the great mass of loose material that the stream has brought down has filled its bed, good sections are not seen. This is unfortunate, for,

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between No. 3 and No. 6 there is evidence that there is a change from the comparatively undisturbed beds on No. 3 to a compound fold with local irregular bends on No. 6. The illustrated sections for these creeks show the change to a deep synclinal trough on No. 10. The upper measures also seem to have been cut off by the fault, and the lower measures are the only ones that reach as far as Creek No. 10.

PANTHER RIVER COAL AREAS.

Three distinct coal areas are crossed by this stream before it issues from the mountains. That which is in almost direct line and connected with the one through which the Bow river passes is here extremely shallow, and very little of the coal-bearing rocks are found. The area to the east of this is not of great extent, but may prove to have some workable coal seams, while the third area, just within the mountains, is larger, and is described in the summary report of this department for 1904. The report is accompanied by a map of the portion which is most accessible, namely, that near the Panther river. The structure of the three basins and their relation to each is illustrated in a section on the margin of the Costigan map (No. 892).

PALLISER AREA.

The central area which is mapped on the Panther sheet of the Cascade basin is there referred to as the Palliser basin. This name is used because the area is within the mountains forming the Palliser range, as distinct from the basin to the west through which the Cascade river cuts. This coal area, as will be seen from the map, is not of large extent south of the Panther river, and although the depression is wide the coal rocks are found only on the higher hills. Along the fault line east of the Bare mountains to the north of this stream the limestones are brought against the pushed up and crushed edges of the coal rocks which dip generally toward the fault, and in the narrow strip just to the east of this line through these foothills there is probably sufficient coal to pay for working. This is easily accessible from the valley of the stream. On the higher points of several hills in the valley the lower parts of folds in the coal measure remain, and coal seams are in evidence, but they are very much crushed, and turn up at each side of the hill, so that there is little coal in the exposure. Other seams, the continuation of these fragments, were, however, found in the high ground nearer the fault line. On the south side of the river the most prominent ridge rising from the east slope of the mountain ridge showed very good sections in a deep ravine, and here two coal seams dip downward toward the west after passing through a deep fold at the eastern edge of the escarpment. The lowest seam is of bright, hard coal, two feet in thickness, and gives the following analysis, according to Dr. Hoffman:—

Moisture.	1.13
Volatile combustible matter.	11.59
Fixed carbon.	84.94
Ash.	2.34
	100.00

This coal does not make a coherent coke, so that it is as hard or harder than that at Canmore, but is very clean and free from ash.

Above this another seam was uncovered, but was of much duller lustre and appeared more crushed. The thickness here is five feet, with soft shale and sandstone

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roof, and, like the first, does not coke. The analysis supplied by Dr. Hoffmann gives:—

Moisture.	0.93
Volatile combustible matter.	10.58
Fixed carbon.	83.55
Ash.	4.94
	100.00

On the north side of the stream these seams were not discovered, but there is a probability that they continue across, and as there is a larger area which is occupied by these rocks there should be more seams than those already found.

CASCADE TROUGH.

Although a wide belt of Cretaceous rocks occupies the basin, the greater part is taken up by the lower members of the series, and the larger part of the area shown on the Panther River sheet is in the form of a trough, the lower Cretaceous beds continuing across and forming a belt along the western margin. In this part the higher beds containing the coal appear only in the hills between the limestone mountain ridges, and show that there were very strong folds in the upper beds, as all the exposed coal-bearing rocks are very much bent in folds which apparently follow the general direction of the valley. As coal areas, those south of the Panther river are not of any great moment on account of their size and position, and the character of the seams, which are very much crushed and bent.

North of the river this broad shallow basin, which is terminated on each edge by an upturn of the lower beds, is gradually narrowed, and as the highland between the Panther and Red Deer river is approached the form is changed to that of a monocline or a block in which the beds dip in one general direction, in this case toward the upheaved rocks that form the Vermilion range. The coal-bearing rocks, which in the shallow basin appear only on the summits of the hills, here again form a narrow strip along the west side in very much the same manner as along the face of the Cascade mountains.

The division between the two types of structure is marked by a heavy fold running from the fault line, at the height-of-land mentioned above, southeastward to the centre of the valley as far as the high land of these Cretaceous hills extends. Northward, the beds dip toward the fault line with less disturbance, and a few seams were noted that might repay exploiting. The lower seams observed near the Panther river in the Palliser basin just to the east are found again here in the hills at the height-of-land in a hill to the south of a small lake which drains to the Red Deer. The coal here seems to be soft and very much crushed. The expectation that this would prove as hard as in the Palliser basin was not realized, and the coal of the five-foot seams is reported by Dr. Hoffmann as making a firm compact coherent coke. The analysis of this sample gave:—

Moisture.	0.72
Volatile combustible matter.	21.28
Volatile combustible matter.	75.80
Ash.	2.20
	100.00

Coke per cent, 78.00.

Another seam in the ridge to the north of this lake, much higher in the series, is reported by my assistant, Mr. G. E. Malloch. This is of the same general character as the five-foot seam just noted, but there is a much greater thickness,—over seven feet. That the coal in this vicinity is generally of a softer character is also shown by an analysis given by Dr. Dawson for a seam observed on the Red Deer river a few miles north of this map. Prow mountain is the northern end of the Vermilion range

as it reaches the valley of the Red Deer. The following quotation contains the information we have at present for the seams there exposed. "In the northern face of Prow mountain—a bare, bold, limestone peak—the overturned character of the western edge of the Cretaceous trough is clearly seen. On the Red Deer, at its base, and quite close to the overlapping edge of the limestones, is an exposure showing a coal seam several feet in thickness, but so much crumpled and broken that the precise width could not be ascertained. Coal was also observed in the bed of a stream joining the river from the north. A specimen from the bed on the river was found to yield a firm coke, and to be, so far as composition goes, an excellent fuel, giving 2.9 per cent of hygroscopic water, 62.95 per cent of fixed carbon and only 4.89 per cent of ash. (See p. 7 M., Vol. 1.)"

FERNIE SHALE.

The dark shales that underlie the sandy measures constituting the Kootanie series of Dawson are well represented in many exposures in the area covered by the accompanying maps. The principal exposures are to be seen on the following streams: (1) Stream flowing along the west slope of Pigeon mountain; (2) Cascade river; (3) Panther river; (4) Snow creek.

Of these the chief are those of the Cascade, and give the best section of its thickness. The stream, from where it crosses the Cascade mountain ridge through a gap caused by a cross fault, flows generally on the dark shales. About five miles above the mouth of Devil creek it turns to the east and then southward to follow approximately a line of fault in the limestone range. Below this it again crosses the limestone ridge through a narrow gorge, and before it joins the Bow river has crossed the dark shales and nearly the whole section of the Cretaceous. On this part it cuts the measures at nearly right angles, the thickness of the formation, as here obtained, measuring 1,600 feet.

In the lower part the rocks are of a lighter colour, and consist of dark grey sandstones and shales, but these grade upward into very dark shales. The whole formation seems to be of marine origin, as the only fossils collected in this special district consist of a few Belemnites, but larger collections have been obtained in small exposures to the east. In 1887 Mr. McConnell collected from a small outlier of these shales near the east end of Lake Minnewanka (Devil lake) a series of ten marine species,* eight of which are found in the lower part of the Queen Charlotte Islands coal-bearing rocks. These latter have since been determined as Jurassic. The typical locality near Fernie has supplied but few fossils, but one of these *Cardioceras canadense*, is undoubtedly Jurassic.

The exposures in the Cascade valley indicate some disturbance during the mountain building operations to the lower members of this series. On the pack trail across the loop made by the river into the limestone ridge to the east it is found that a depression, which may at one time have been followed by the creek, runs along the line of contact between the dark shales and the underlying dolomite limestones which form the top of the Upper Banff shales. Into this old valley, which now is about seventy-five feet above the Cascade at its northern end, creeks No. 1 south, Coal creek and No. 1 north flow, to turn northward to the Cascade. At the small gorges made by each on entering the valley the grey sandstone and shales of the lower part of the Cretaceous are seen, but they are bent in a reversed curve showing a slight yielding to the lateral pressure from the overthrust at the west. Near the mouth of Creek No. 3, on the Cascade, the same sandstone and shales outcrop, but they are not bent as sharply.

* Annual Report, Geol. Surv., Can., Vol. I. (N.S.), p. 146 B.

* Vol. I., part III., Contributions to Canadian Palaeontology.

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Very few exposures that can be considered as near the base of the formation are seen in the banks of Cascade river until the east branch is reached, where again the contact is seen, but there seems less disturbance on the lower measures. The basin here is much shallower, and the overthrust of the west side seems changed to a reversed fold, so that there is more chance that the members of the series which occupy the concave side are slidden against one another than in the thick monoclinial block at the south end of Cascade mountain. The folds at the mouth of Creek No. 3 and at the bend north on Coal creek must indicate a slight slip along the bedding planes which dies out to the south. Another point of possible disturbance in these lower shales is along the continuation of the fault line in the limestone range to the east, at the cañon on the Cascade. The throw of this fault becomes less toward the south and runs out toward the main valley above Cannore. Exposures of the lower shales occur on the creek joining the Bow from behind Pigeon mountain. Most of the exposures on it are of the red shales of the Upper Banff, probably Carboniferous, but a portion of the black shales of the Lower Cretaceous section also appears. In this a few Belemnites were found.

APPENDIX I.

REPORTS REFERRING TO GEOLOGY AND STRUCTURE OF THIS AREA.

- (1) Preliminary Report on the Physical and Geological features of the Rocky Mountains. By George M. Dawson. Part B., Annual Report, Vol. 1. (1885).
- (2) Report on the Geological Structure of a portion of the Rocky Mountains. R. G. McConnell. Part D., Annual Report, Vol II. (1886).
- (3) Summary Report of the Geological Survey Department, 1903, p. 83. D. B. Dowling.
- (4) Summary Report of the Geological Survey Department, 1904, p. 107. D. B. Dowling.
- (5) The Stratigraphy of the Cascade Coal Basin. By D. B. Dowling. Journal of Canadian Mining Institute, Vol. VIII.

DOMINION OF CANADA

ANNUAL REPORT

OF THE

DEPARTMENT OF INDIAN AFFAIRS

FOR THE

YEAR ENDED JUNE 30

1906

PRINTED BY ORDER OF PARLIAMENT



OTTAWA

PRINTED BY S. E. DAWSON, PRINTER TO THE KING'S MOST
EXCELLENT MAJESTY.

1906



To His Excellency the Right Honourable Sir Albert Henry George, Earl Grey, Viscount Howick, Baron Grey of Howick, in the County of Northumberland, in the Peerage of the United Kingdom, and a Baronet; Knight Grand Cross of the Most Distinguished Order of Saint Michael and Saint George, &c., &c., Governor General of Canada.

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MAY IT PLEASE YOUR EXCELLENCY:—

The undersigned has the honour to present to Your Excellency the Annual Report of the Department of Indian Affairs for the fiscal year ended June 30, 1906.

Respectfully submitted,

FRANK OLIVER.

Superintendent General of Indian Affairs.

OTTAWA, November 22, 1906.

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REPORT
OF THE
DEPARTMENT OF INDIAN AFFAIRS
FOR THE YEAR ENDED JUNE 30, 1906.

DEPARTMENT OF INDIAN AFFAIRS.

OTTAWA, November, 1906.

The Honourable FRANK OLIVER.

Superintendent General of Indian Affairs,
Ottawa.

SIR.—I have the honour to submit the report of the Department of Indian Affairs for the fiscal year ended June 30, 1906.

A study of the various reports and statistical statements furnished by the department's officials, officers and agents, presented herewith, will show that during another year natural conditions have contributed towards the prosperity of the Indians with a uniformity which could hardly have been expected, considering the extent of territory and variety of environment involved.

The income derived exclusively through the exertions of the Indians themselves has passed the five million mark, and exceeded that of the preceding year by over half a million of dollars.

Extreme mildness of a winter season in some directions relieves the tension of the struggle for existence of both man and beast, but it is questionable benefit to the health of a people so subject as are the aborigines to pulmonary and more or less kindred diseases, and whether from that cause or not, the mortality has been rather heavy, and the natural increase has somewhat disappointed such expectations as other conditions would seem to have warranted.

With reference to racial amalgamation, it was pointed out last year that the most advanced bands might be deemed to have reached the halting point under existing conditions on the march towards higher civilization, and as was to have been expected, they have remained there during the year.

There has, however, been perceptible progress in the younger provinces in the adoption by augmenting numbers of the industrial pursuits and manner of living of the dominant race, as also in the acquisition of its tongue and appreciation of its educational advantages.

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With regard to miscegenation by mixture of blood, existing conditions are less favourable than in the past.

In the earlier days of settlement in the older provinces, both social and legislative conditions tended to facilitate the marriage of Indian women by white men and the adoption of the latter by the various tribes, and as a consequence among many of the bands in those provinces a member of absolutely pure native blood is somewhat rare.

In the younger provinces conditions were for a comparatively short time so similar in some respects that such marriages were not then uncommon, but the rapid transition from the pioneer and celibate to that of the family class of settler, has somewhat abruptly terminated the increase of such alliances.

At the present time the nuptial contracts known to exist between the dominant and aboriginal races within the boundaries of the provinces of British Columbia, Manitoba, Saskatchewan and Alberta do not in the aggregate greatly, if at all, exceed the number of one hundred and fifty, and for the most part represent a survival of what occurred some decades ago.

The commissioners for the new Treaty No. 9, viz., Messrs. D. C. Scott, S. Stewart and D. G. MacMartin, resumed the work which they were unable to complete last season and brought their task to a successful termination after having visited Indians to the aggregate number of about a thousand, at the following posts, viz.: Abitibi, Matachewan, Mattagami, Flying Post, New Brunswick House and Long Lake. Their report of their work for the two seasons over which their labours have extended, will be found among others herewith presented.

VITAL STATISTICS.

The following tables show the number of births and deaths by provinces, together with the respective natural gains and losses to the population, also a comparative census of the population throughout the Dominion, including that beyond treaty limits, so far as known, for the years 1905 and 1906:—

Provinces.	Births.	Deaths.	Gain.	Loss.
Ontario.....	603	539	64	
Quebec.....	304	240	64	
Nova Scotia.....	94	66	28	
New Brunswick.....	81	68	13	
Prince Edward Island.....	8	12		4
British Columbia.....	552	594		42
Manitoba.....	370	349	21	
Saskatchewan.....	261	205	56	
Alberta.....	238	256		18
Total	2,511	2,329	246	64

It will be observed that the net gain from natural increase is 182, or 91 less from the same source than the year before, when it was 273.

Infant mortality has been somewhat heavier than usual, especially in British Columbia, where epidemics of whooping cough and croup swept the coast.

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Provinces	1905.	1906.	Increase.	Decrease.
Ontario	20,850	23,728	2,878	
Quebec	11,218	11,307	89	
New Scotia	1,993	2,148	155	
New Brunswick	1,609	1,732	33	
Prince Edward Island	288	284		4
British Columbia	25,142	24,997		145
Manitoba	6,870	8,074	1,204	
Northwest Territories		3,473		
Saskatchewan	17,493	7,425		1,068
Alberta		5,512		
Outside Treaty Limits	22,084	20,714		1,370
Total	107,637	109,394	4,359	2,602

The respective increases of population in the provinces of Ontario and Manitoba, the decrease in the Northwest Territories and outside of treaty limits, and the aggregate result for the whole Dominion, would for purposes of comparison be misleading without the following explanations.

The increase in Ontario, amounting to 2,878, is accounted for as follows, viz.:—

Gain by natural increase	64
Gain by migration	20
Gain by transfer to the new Treaty No. 9 of Indians formerly shown in Keewatin	1,370
Gain by addition to the same treaty of Indians hitherto not shown at all	1,425
	<u>2,879</u>

leaving a difference of one unaccounted for.

The reserves in the Birtle agency, and one or two others which so far have been treated as belonging to the Northwest Territories, have, following upon the recent creation of the new provinces, been transferred to Manitoba, where they statistically belong, which results in an addition to that province of 1,217 souls.

The deduction from this number of a loss of 21 by excess of deaths over births, and the addition of 8 by these fluctuating migrations, which are always occurring, especially in proximity to the United States, give the true net increment of 1,204.

It will be observed that this transfer more than accounts for the decrease shown to have occurred in what was formerly known as the Northwest Territories.

The reduction of the number shown last year as outside treaty limits by 1,370 follows upon the transfer to the new treaty hereinabove described.

The net increase for the whole Dominion, amounting to 1,757 souls, is made up by the inclusion of Indians not hitherto shown in Treaty No. 9	1,425
Gain by natural increase	182
Gain by migratory fluctuation	150
	<u>1,757</u>

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HEALTH.

In view of the technical character of the subject and the comparatively exhaustive report of the Chief Medical Superintendent submitted herewith, a few remarks of a general nature relative to the health of the Indians will suffice here.

Observations relative to the health of the Indian population must be prefaced by the reminder that the normal condition which forms the standard for comparative statement is peculiar, and that the death-rate under ordinary circumstances greatly exceeds that of other sections of the community.

The excessive mortality occurs mainly among Indians in process of transition from the aboriginal to the civilized environment, and some forms of disease then engendered long outlive their immediately provoking causes.

These ailments are mainly tubercular, or more or less kindred in their character and are widespread, fatal and extremely difficult to eradicate.

It will, therefore, be apparent that there are two main antagonistic forces at work which tend to preserve an approximate equilibrium in the growth of the race, viz., on the one hand during certain stages of development the growing understanding of the laws of sanitation, and on the other the addition through new treaties and from other causes to the numbers brought into initial contact with civilizing influences.

It will, however, have been observed by those who have at all closely followed statistical records, that for many years past, there has been a steady and uninterrupted, although very gradual, upward movement in the numerical scale.

The Chief Medical Superintendent points out on the threshold of his report one of the many, although perhaps not the greatest of the difficulties with which the department has to contend in effecting any radical improvement in hygeian conditions, but apart from the financial aspect of the matter, the habits and practices of the Indians themselves in the initiatory environment of civilization, strongly militate against efforts to effect amelioration.

Among and perhaps the most dangerous of these is the excessive crowding into small houses (if indeed the earliest forms of fixed abode are entitled to be so designated), which, always defective in ventilation, are, during the cold season, almost hermetically separated from the outside atmosphere in the desire to economize fuel.

If anything further can be imagined necessary for the exhaustion of the potentialities of conditions so produced, it is furnished by the practice of continual dancing, which stirs up the dust which the promiscuous expectoration of the affected has charged with germs, and at the same time stimulates respiration.

Ignorance of nursing, inattention to the directions of medical advisers, such as exposure to inclement weather even when in process of convalescence from serious ailments, defective preparation of food and premature marriages, are among other hindrances to health which have been repeatedly pointed out.

The department has not infrequently laid itself open to the ill-considered charge of arbitrary repression in its efforts to overcome these inimical conditions, but while much is accomplished by instruction and restraint, practical belief in the laws pertaining to sanitation must in the main be experimentally acquired.

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For the class of disease most prevalent among the Indians, it seems, as already stated, very questionable whether winters as mild and open as the last are beneficial.

The unusual prevalence of dampness under foot must certainly be highly prejudicial to people who to a large extent depend upon moccasins for their protection, and it seems reasonable to suppose that atmospheric conditions are apt to be provocative of pulmonary and throat complaints.

Be that as it may, influenza has been prevalent throughout the reserves, and croup was epidemic along the northwest coast of British Columbia.

At Mingan, on the Lower St. Lawrence, there occurred an outbreak of what was described as virulent bronchial sore throat, suggestive of diphtheria, which disease in an unmistakable character broke out among the children in New Brunswick, also among the Six Nations band in Ontario, and in a malignant form at Cold Lake in the Saskatchewan, where nineteen fatalities resulted.

The most serious epidemics of whooping cough occurred in the agencies along the coast of British Columbia and at Fort Alexander, Hollow-water, and Black River in Manitoba, where between measles and scarlet fever thirty deaths occurred.

AGRICULTURE.

The able-bodied working Indians devote themselves in about equal numerical proportions to occupations which may be roughly classified as follows, viz.: agriculture with its kindred live stock industry, the marketing of labour including various minor industries, and natural resources, the principal of which are hunting, trapping and fishing, but a considerable number do not confine themselves exclusively to any one line of employment.

To decide the comparative value of these various occupations presents a somewhat complex problem.

As an elementary civilizing factor, agriculture seems clearly entitled to preference, but on the other hand, if immediate cash returns be made the standard, it might with equal readiness be awarded to the marketing of labour.

During the year, the value of farm produce including beef is estimated at \$1,379,382, as against \$2,374,762 derived from wages, &c.

There are, however, other aspects of the question to be considered, such as the respective cost of living, comparative temptation to squander and to more pronounced forms of immorality, the accumulation of property, and so forth.

The only direction in which the department can appreciably control the selection of occupation is among those emerging from aboriginal conditions, for whom agriculture is clearly the best and often the only available employment.

The main sphere of this influence has been so far within the provinces of Manitoba, Saskatchewan and Alberta, or in other words, within the limits of Treaties Nos. 4, 6 and 7.

The Indian commissioner's remarks in his report upon the gradual abolition of the ration-houses on the reserves are well worthy of some expansion here, because

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indicative of the fruition of a policy which has been earnestly, patiently and uninterruptedly pursued from the commencement of treaty relations.

That policy may be concisely described as that of helping the Indians to help themselves.

It would take too long even to enumerate the difficulties encountered in carrying that policy into effect and the measures devised to overcome them.

However, as an illustration, mention may be made of one difficulty experienced in dealing with even the most amenable and industriously inclined. The Indians have never manifested any slowness in grasping the fact that irrespective of their own exertions, they would not be left to starve, nor could the withholding of rations as a disciplinary measure be freely employed in the early days, consistently with the safety of settlers and their property. The result was that the industrious found themselves little, if at all, better off than their brethren who opposed *vis inertiae* to efforts to arouse them. To overcome this, the department has always refrained from too abruptly requiring the whole proceeds of individual industry to be made directly subservient to the withdrawal of assistance, but has encouraged the investment of any margin in property, until its acquisition has engendered the pride of proprietorship and a spirit of independence, with a corresponding distaste for inevitable pauperism and acceptance of charity.

This policy serves to explain what has often and very naturally been somewhat of a puzzle to the uninitiated, viz., the continuance of assistance to Indians who might appear to have passed the point of requiring it.

In illustration of the rapid consummation of this policy within the last few years, it may be mentioned that in Treaty No. 7, where the main reliance is upon live stock, although the Indians have only of comparatively recent years been induced to engage in stock-raising, a reduction as compared with five years ago, amounting to \$41,977 has been made in the estimated expenditure for beef-supplies for the proximate fiscal year, nor has this been effected by any increased estimate for flour, which has in turn been reduced by the value of \$6,300.

In Treaties Nos. 4 and 6, a corresponding saving in beef, bacon and flour has been effected to the extent of over \$19,000.

In Treaty No. 4, the Indian population aggregates 3,108 souls, and during the coming year the necessity for aiding 340 crippled, aged and destitute individuals is anticipated, as well as assisting to some slight extent and at certain times, as for example, during the haymaking season, 437 deserving workers.

In Treaty No. 6, where there is a population of 6,106, provision has been made against the expected requirements of 985 helpless and destitute and 1,762 of the industriously inclined.

In Treaty No. 7, out of a population of 3,402, there are 836 destitute to provide for, and 1,382 workers who will probably require occasional temporary help.

Should the rate of progress during late years be maintained, the prospects for independence seem bright.

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To return from this partial digression, the area cultivated in each province, the quantities of resultant products, together with their market value, will be most conveniently shown in the following table, but it has to be premised with regard to these and all other industrial statistics herein presented, that last year's figures have been used as a conservative estimate for two of the British Columbia agencies from which exact figures for the year could not be ascertained in time for use.

AGRICULTURAL STATISTICS.

Province.	Population.	Acres.	Grain and Roots.	Hay.	Value.
					\$.
Ontario.....	23,728	18,267	594,634	28,272	374,380
Quebec.....	11,307	4,697	91,386	7,939	83,135
Nova Scotia.....	2,148	234	9,395	919	14,018
New Brunswick.....	1,732	536	13,970	310	8,245
Prince Edward Island.....	284	233	2,474	56	1,080
British Columbia.....	24,997	9,243	338,605	12,320	303,852
Manitoba.....	8,074	4,647	123,771	16,028	119,039
Saskatchewan.....	7,425	8,255	193,071	34,152	171,701
Alberta.....	5,512	1,843	38,264	17,979	66,897
Total for 1906.....	85,207	47,955	1,405,570	118,005	1,142,347
Total for 1905.....		44,196	1,264,705	114,183	1,129,265
Increase.....		3,759	140,865	3,822	13,082

With few exceptions, or slight modifications in the various provinces as need not be particularized, it may be asserted that the season was very favourable for seeding although, in places, somewhat wet for planting, at any rate on low-lying ground.

In some districts somewhat more moisture when grain was in process of maturing would have improved the quality of the yield, while rather less would have been of advantage to the securing of crops, and have been of benefit to roots; but on the whole there was little to detract from a general cause for gratitude.

In the maritime provinces and more or less in that of Quebec, the lands have become much exhausted through continuous cropping, regardless of rotation or other methods of recuperation, while interest and energy to remedy this defect are lacking.

In the prairie provinces the want of fertilizing has been comparatively little felt so far, if only for the reason that fresh ground can be readily brought under cultivation.

The failure has rather been with regard to employing such careful methods of cultivation as are required to keep fields free from weeds, to retain moisture against periods of drought, and generally to facilitate early maturing before the advent of frost.

In British Columbia the more rapid extension of agricultural effort is hampered in some districts by the dearth of suitable lands, and in others by the necessity for irrigation, but the Indians concerned are with characteristic energy overcoming the latter defect.

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In Ontario many of the farmers would rank as advanced, and the rest as average agriculturists in any communities, whatsoever their nationality.

STOCK RAISING.

In the older provinces the keeping of live stock forms a subsidiary feature of agricultural pursuits and is done to the extent usual among mixed farmers, but in the younger, in districts not adapted for husbandry, the culture of the soil is rather as a supplement to stock-raising.

The fact that during the year beef was sold or consumed from the Indians' herds to a value of \$237,035 is sufficient proof of the increasing practical interest being taken in this industry.

To avoid the complication of a more detailed comparison which would result this year from the transfer of the Birtle agency statistics to the province of Manitoba, and the creation of the new provinces, it may suffice to mention that the aggregate increase of horned stock throughout the reserves has exceeded 3,000 head, which in view of the number beefed or sold, may be regarded as satisfactory.

Conditions have been unusually favourable, as an abundant crop of grass, and good weather for curing it has been the rule, while the winter season, although in some districts somewhat prolonged towards its close was, generally speaking, decidedly mild, which combined advantages resulted in the wintering of the herds with a very small percentage of loss.

The quality of the stock amply proves the wisdom of having for years past encouraged and when necessary assisted the Indians to introduce high class bulls into the reserves, and at the same time having severely discouraged breeding from inferior animals.

The extent to which the Indians have of recent years been learning to recognize the value of live stock, is evidenced by the alacrity with which they will expend their labour and funds on the erection of fences to prevent their cattle from straying, and to protect the hay and grazing lands.

The value of milk and its products is gradually becoming more widely appreciated, so much so in fact that careful supervision has to be exercised to prevent its utilization to the detriment of the calves.

The fact will be recalled that some few years ago the department came to the conclusion that the time had arrived when the breed of horses on the reserves might be graded up so as to meet the agricultural and other requirements of the Indians themselves and produce a generally marketable quality, without the danger of encouraging the owners to wander about and neglect their work.

This is being increasingly effected with excellent results, not only in the interests of the Indians who take very readily to this branch of live stock industry, but indirectly to the advantage of horse-breeding throughout the districts affected.

The move in the direction of getting rid of herds of useless ponies which have for years past been gradually discarded in favour of horned stock, has thus received an

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additional impetus, and the advance of settlement further serves to inculcate an appreciation of the value of pasture-lands, and the advisability of reserving them for remunerative stock.

WAGES AND VARIOUS EARNINGS.

The aggregate revenue from wages amounted to \$1,727,009, an increase as compared with the preceding year of \$105,280, and the total derived from what are classed as various earnings was \$647,753, a decrease of \$44,427, making a net increase from the combined sources of \$60,853.

Without detracting in any way from the credit due the Indians for having taken advantage of their opportunities, it has to be admitted that much of the rapid augmentation of earnings which has occurred of late years is attributable to the phenomenal commercial prosperity of the country at large, which has not only tended to encourage the industries which afford the Indians an opening for their services, but has furthermore had a marked effect on the market for natural products, such as furs and wild berries, as well as for fancy wares, the manufacture of which is peculiar to themselves, and other minor industrial products.

As the older provinces have been most affected in the directions indicated by the prosperous conditions, it naturally follows that the revenue from the sources under consideration has expanded most considerably in them.

The province of Quebec, however, has formed an exception, and although in proportion to population it has kept well to the front, there has been some falling off in revenue from wages and minor industries.

This slight comparative retrogression may doubtless be accounted for by the superior attraction which the excellence of the season for hunting and trapping, offered to a proportion of labour which would under ordinary circumstances have been devoted to other occupations.

The increase in revenue from wages in British Columbia has not been sufficient to account for the falling off in various earnings, so it seems probable that the latter has been caused by a corresponding allurements in the direction of the fisheries.

In Manitoba a marked increase has been observed with regard to the earning of wages, and as occupation is mainly afforded by the fishing companies and the lumberers, the favourable character of the season has doubtless had its influence in one direction, and the expansion of the industry in the other, while activity in prospecting has contributed by affording employment as guides.

In the same province, and still more in those of Saskatchewan and Alberta, the influx of settlement has considerably extended the market for certain classes of wares, such as household articles manufactured from birch-bark and others, such as axe handles, as also wild berries and other natural products.

HUNTING AND FISHING.

The aggregate earnings from hunting and trapping were \$762,398, an advance over the year before of \$152,378; while the revenue from fishing was \$525,889, an increase of \$58,931.

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The farming Indians in the organized portions of the older provinces, with the exception of some few who go to considerable distances to indulge their preference for the chase, depend upon fishing and hunting no further than to furnish a supplementary variety to the larder, and sufficient quantities of small game and fish were secured for their requirements.

In the province of Quebec, along the Lower St. Lawrence, where hunting and trapping form the mainstay, if not the only resource, of the bulk of the Indian population, the abundance of fur animals, the withdrawal of the temporary prohibition affecting beaver, the high price for pelts, and the prevalence of cariboo inland, all combined to render the year an exceptionally profitable one, and it is gratifying to learn that the Indians availed themselves of the opportunity to discharge some old, as well as their current obligations to the traders.

In Western Ontario the fishing was not up to the average in Lake Superior, although somewhat better in waters further inland, and some slight falling off in revenue occurred.

Game was fairly plentiful, and although the larger fur animals were somewhat scarce, the smaller ones were found in greater number, and the prices for pelts were high, so that one way and another the Indians concerned fared by no means badly.

In British Columbia the salmon fishing is one of the great mainstays of the Indians, both as a medium for employment of their labour and as a direct source of food-supply.

Every fourth year the run of the sock-eye, which is the salmon of greatest commercial value, is peculiarly abundant, and during the years when this is expected the Indians assemble at the canneries in increased numbers. This year these conditions operated to render it necessary at some of the canneries to limit the catch to be taken from each boat, but on the other hand the cleaning and cutting up of the fish and the filling of the cans furnished the women with ample employment, so that on the whole results were very satisfactory. Although the year was an off one for the dog salmon, which the Indians prefer for drying for winter consumption, the scarcity was not such as to entail any serious consequences.

Although thrown into the shade by the salmon fisheries, the halibut, oulachon and others along the coast are of no mean importance, and the season was a fairly successful one for them.

During the early part of the hunting season, the deer were far from numerous, but became more so later on.

Fur animals, such as lynx, marten, mink, fisher, otter and racoon, were with the exception of the first mentioned decidedly scarce, but the prices obtained had a compensatory effect and the earnings show some advance.

In the West Coast agency the sealing industry was not a success, those who engage in it along the coast having made but little, while the better success of those who ship as hunters on the sealing vessels was offset by another of those disasters which occur from time to time, viz., the loss of a schooner which had twenty-five Indians on board.

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In Manitoba the fishing season was generally a good one, although in some districts the Indians complain of the effects attributed by them to the operation of the fishing companies.

Game was plentiful throughout the province, and excepting in so far as concerns the Pas district, the same thing may be said as to fur, and a very considerable increase in revenue from these sources resulted.

In the provinces of Saskatchewan and Alberta, many of the farming Indians continue to depend to an appreciable extent upon fishing and hunting, although comparatively few have access to fisheries, and some outlying bands continue to devote themselves wholly to these pursuits.

The fishing was better than usual and small game, such as rabbits, ducks, and prairie chickens fairly plentiful, as also big game where it exists, and some fur animals such as mink, lynx and musk-rats.

Under these conditions in conjunction with good market prices, the earnings from these sources were considerably larger than during the preceding year.

MORALITY.

Remembering that the whole superstructure of attainment, material, moral and intellectual, can only be reared upon the foundation of sobriety and temperance, also the peculiar temptation to excessively indulge the natural appetite for intoxicants to which contact with civilization exposes aboriginal races, it is not surprising that at an early date in the history of this country's dealings with the Indian population, traces are to be found of the enactment of legislation intended to prevent access to liquor, which somewhat crude in its beginning has gradually reached the limit of stringency deemed prudent.

It is doubtless true that in the course of transition from natural to civilized conditions a point is attained where such special legislation exhausts its potentialities for good, and it may be open to question with respect to some of the bands in the older provinces whether the time has not arrived for leaving the matter to the operation of the natural law which tends towards the survival of the fittest.

Be that as it may, the difficulty of making laws nicely adjustable to the respective requirements of all the various stages of aboriginal development is practically insuperable, and it cannot be successfully disputed that the Indians who have to-day acquired the highest degree of self-restraint owe their preservation in the past, as do others in the present, to the protection afforded by this special legislation.

It is, therefore, somewhat surprising to find a lack of wider sympathy and co-operation in the effort to enforce prohibition, a task which under the most favourable circumstances conceivable, would be most arduous, with relation to individuals and communities within easy access of others where the manufacture of and traffic in intoxicants obtain.

The most conspicuous deviation during the year from what may be called the normal condition of this traffic has occurred in the provinces of Saskatchewan and Alberta, also to some extent in British Columbia, in all of which advancing settlement has brought temptation and opportunity to Indians formerly beyond the danger zone.

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but as the settlers become more acquainted with the law and better appreciate the wisdom of its provisions and the situation loses its novelty for the Indians, the equilibrium will doubtless be restored, and in the meantime the increased danger is being met by proportionate vigilance.

Among hunting Indians indulgence largely takes the form of carousal when they come in to market their furs, and while the effects may not as a rule be as disastrous in some directions as from more habitual drinking, there is little to choose in so far as concerns material prosperity, since the proceeds of long terms of industry may be dissipated within a few weeks or even days of debauchery.

This form of evil is, of course, hard to suppress in districts at a distance from legal executive machinery, and where any attempt to introduce it at once attracts attention.

Indications have been observed during the year that a salutary lesson taught those concerned in this traffic along the Lower St. Lawrence a few years ago, is fast fading from memory and will apparently have to be repeated before long.

Among the somewhat kindred class of Indians inhabiting the district immediately west of Lake Superior there is ground to fear that the traffic has been making headway, and proximity to the international boundary line adds to the difficulty in repressing it.

On the other hand evidence has not been wanting in other directions of success having attended the department's efforts to combat the evil, and this has nowhere been more apparent than among the Indians who annually assemble in large numbers at the canneries in the Fraser river district.

Among the more tangible proofs of successful repressive effort is the augmentation of collections from fines imposed for infraction of the law, which have of late rendered the crusade against the liquor traffic self-supporting.

To turn to what, but for its relative position in the chain of cause and effect, might take precedence of temperance in point of importance, viz., the recognition of the obligations of the nuptial contract, it has to be admitted that, particularly among Indians of the younger provinces, conditions leave much to be desired.

The influence of tribal usages still survives more or less even among communities or sections of communities where they have been discarded.

Within several of the agencies in the provinces of Manitoba, Saskatchewan and Alberta the practice of discarding wives or husbands and contracting fresh alliances has almost, if not completely, disappeared, but is not uncommon in the majority, and in some few prevails to the extent of affecting about ten per cent or even a greater proportion of the married population.

In parts of British Columbia matters are in a considerably more backward condition, for, although the practice is almost unknown in the Kootenay district, decidedly rare in the Babine, and not common in the Williams Lake agencies, its proportions gradually extend on other reserves, until it reaches its climax in the West Coast and Kwawkweth agencies, where probably something like half the population are more or less affected.

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There can be little doubt that premature marriages and the universal practice of giving presents to the parents of the bride, which has a tendency to degenerate into something approximating if not actually constituting purchase, are largely accountable for this state of affairs.

It must, moreover, in fairness be remembered that to a large extent the separations or desertions on either side result from causes which would in comparatively civilized society be generally considered sufficient to justify divorce, a recourse to which the Indians are practically denied access.

So much, however, results from mere caprice, greed of gain or other indefensible causes, that it seems deserving of serious consideration whether remedial legislative measures should not be enacted, and it is gratifying to feel that the moral sentiment of a great majority of Indian communities would support such action. As to other forms of sexual immorality it may be observed that avowed prostitution is rarely to be met with on the reserves.

The main form of this vice, at any rate so far as white men are involved, consists in the peddling round of women and girls by the most degraded class of Indian to lumber or fishing camps, where practically celibate conditions prevail, or is carried on by vagrant Indians who camp in the vicinity of frontier towns or settlements.

While prominence has been given to the exceptional and worst side of Indian morality, it must not be forgotten that a large majority live temperate, respectable, law-abiding and industrious lives, which will in all respects bear favourable comparison with conditions which obtain among communities of other nationalities, for which state of affairs the large share of credit due to the representatives of the various churches and religious bodies who labour among the Indians is gratefully acknowledged.

EDUCATION.

The schools in operation were as shown in the following table:—

Province.	Day.	Boarding.	Industrial.
Ontario.....	76	1	5
Quebec.....	18		
Nova Scotia.....	11		
New Brunswick.....	6		
Prince Edward Island.....	1		
British Columbia.....	35	8	9
Manitoba.....	46	9	3
Saskatchewan.....	19	13	3
Alberta.....	9	17	3
Northwest Territories (inside Treaty limits).....		2	
Outside Treaty limits.....	7		
Total.....	228	50	23

Of these 301 schools 46 are classed as undenominational, 104 are conducted in connection with the Roman Catholic Church, 89 with the Church of England, 45 and 16 with the Methodist and Presbyterian Churches, respectively, and one with the Salvation Army.

As compared with the preceding year there has been an aggregate decrease of 4 in the number of the day and of 1 in that of the industrial schools, as against an addition of 3 to the number of boarding schools.

The industrial school closed was that at St. Boniface and the new boarding schools were established at Fort Alexander, Fort Frances and Sandy Bay, respectively.

Redistribution, the causes of which have already been explained in connection with other statistics, has led to the transfer of 3 day schools and 1 boarding school, formerly classed as belonging to the Northwest Territories, to the province of Manitoba, and the apportionment from the same territory of 19 day, 13 boarding and 3 industrial schools to the province of Saskatchewan, likewise of 9 day, 17 boarding and 3 industrial to Alberta, while 3 day schools heretofore shown as outside treaty limits, but now within the boundaries of the new treaty, are classed in the province of Ontario.

The total enrolment of the year was 10,988, of which 5,214 were boys and 4,874 girls, an increase of 26 boys, and a decrease of 69 girls, or a net decrease of 43 pupils.

The percentage of attendance was 62.37 as compared with 62.59 for the preceding year, a fluctuation which would be readily accounted for by the increased migration during a propitious fishing and hunting season.

In Ontario while the reserve remains the chief attraction, industrial schools may turn out boys better equipped to live and work among other communities, but will not apparently tend to produce amalgamation of races.

In Manitoba, Saskatchewan and Alberta, the tendency of growing settlement will certainly be to afford openings for industrially trained youths, and in domestic service for the girls, but it seems certain that for years to come the large majority of the former will have to return to the reserves, and in that event, their need of suitable help-mates to prevent retrogression, must have a distinct bearing upon the length of time during which the young women should be encouraged to devote themselves to domestic service among the settlers.

The justification for the maintenance of industrial as compared with boarding schools depends mainly under existing circumstances upon an experimental solution of the question whether graduates who return to their reserves will retrograde under or elevate the conditions of their environment.

Under the least favourable circumstances these graduates may be expected to exert some elevating influence upon social conditions, and should they themselves backslide in the process, the decline would be to a somewhat improved level, and the truth of this is being demonstrated by certain effects throughout the reserves to which the Indian commissioner refers in his report.

It is obvious that co-operation and mutual support must constitute the most powerful aids to the graduates in their efforts to surmount their surroundings, and to carry their less privileged brethren with them along the path of progress, and it was the recognition of this truth which led to the experiment some few years ago of forming a colony out of these graduates at File Hills. Although hardly out of the experimental stage, results are proving thus far very satisfactory.

The inclusion of native industrially trained mechanics among the members of these Indian communities would tend to render them more self-contained and self-sufficing.

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but the intention of education is not to encourage isolation and self-sufficiency at the expense of amalgamation of the races.

It would seem that the training afforded by the boarding schools should be sufficient for the requirements of present conditions on the reserves, and the Indian parents show a decided preference for this class of school, reasons which among others appear to recommend the policy of encouraging the boarding schools.

Their advantage over day schools in so far as avoiding the retrogressive influences of home life, and overcoming the difficulty of bringing the children of migratory Indians under educational influences, is obvious.

Since, with little exception, Indian parents value education for their children in proportion as it helps them to hold their own in business relations with other nationalities within the limited sphere of a contact which is expanding more rapidly in British Columbia than elsewhere, it is natural to find that growing interest of which the Indian superintendent for that province makes mention in his report.

Among the bands still distant from centres of civilization the need has not yet been felt, for which reason and because of the nomadic habits of the Indians, there is little to be done in the way of education among them for the present.

LANDS.

The sales made of surrendered surveyed lands are shown in tabular statement on page 62, Part II, and during the fiscal year 35,033.46 acres were sold, and realized the sum of \$365,684.04. During the same period 345 Crown grants were issued and recorded under authority of the 45th section of the Indian Act, chapter 43, R.S.C. Returns of patents to the number of 62 were prepared and transmitted to the different registrars of counties and districts in which the lands patented were situate, and four returns were made to the Provincial Secretary of Ontario, of lands patented within the province.

The land on the Stony reserve which was surrendered in May, 1905, comprising 22½ sections, was subdivided and placed in the market for sale by auction at Battleford on June 13, 1905, and 59 quarter-sections were then disposed of, realizing \$38,240.42.

The Assiniboine Indians have surrendered thirty-six quarter sections of the Assiniboine reserve, situated southeast of Indian Head in the province of Saskatchewan. The same were duly surveyed and offered for sale by public auction at Sinitluta on February 14, last. Thirty-four quarter-sections were sold, realizing \$35,345.45.

MINERALS.

During the year a few applications were received for permission to explore, and a few mining permits were granted in the Garden River and Batachawana Bay districts.

LOCATION TICKETS.

Location tickets, granting title under the provisions of the Indian Act to individual Indians for lands on the reserves, were issued to the number of 93, and at the close of the fiscal year there were 1,414 of these tickets current.

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LEASES.

Under the provisions of section 11 of the regulations for the disposal of Indian lands, leases were issued to white men at the request of the Indian locatees to the number of 53. At the close of the fiscal year there were 1,155 such leases current.

TIMBER LICENSES.

Renewed and in force.	31
New licenses issued	6
Berths vacant.	8

SURVEYS.

The following surveys were performed during the year:—

Alberta.

A portion of the Alexander reserve, No. 134, has been surrendered and surveyed into sections for sale.

A strip on the east side of Michel reserve, No. 132, has been surrendered and subdivided for sale. A re-valuation of the surrendered portion on the west side was made.

The boundaries of reserves No. 133A and 133B at Wabamun lake were re-established. No. 133B has been surrendered and subdivided into town lots.

Saskatchewan.

One hundred and thirty-two lots of 80 acres each in the Peepeekesis reserve, No. 81, have been laid out for Indian occupation.

The Cote reserve, No. 64, has been subdivided into sections.

The southern portion of Pasquah reserve, No. 79, has been surrendered and subdivided for sale.

The boundaries of reserves in the Carlton agency have been re-traced.

Ontario.

The sites for the two new Indian villages in the Fort William reserve and the road between them have been surveyed.

Quebec.

A reserve at Manowan lake, Champlain county, has been surveyed and allotted to the Indians residing at that point.

New Brunswick.

The boundaries of the Kingsclear reserve have been re-established.

British Columbia.

A partial survey and examination of the river through the St. Mary's reserve, Kootenay, has been made with the view of taking action to prevent damage by flooding.

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A number of small reserves for fishing purposes for the Hope Indians have been surveyed.

FINANCIAL.

At the close of the fiscal year the capital of the Indian trust fund, which at the end of the preceding year amounted to \$1,545,756.53, had increased to \$4,868,622.

The balance sheet of this fund will be found in Part II of this report, page 175.

The amount expended from the consolidated revenue fund, voted by parliament for the purposes of the department, was \$1,198,350.34.

On June 30, last, the balance to the credit of the Indian savings account for the funding of the annuity money and earnings of pupils at industrial schools, together with collections from Indians for purchase of cattle and ranching expenses, was \$43,173.28. Deposits and interest during the year aggregated \$19,381.01, and withdrawals amounting to \$14,560.89 were made during the same period.

I have the honour to be, sir,

Your obedient servant,

FRANK PEDLEY.

Deputy Superintendent General of Indian Affairs.

REPORTS

OF

SUPERINTENDENTS AND AGENTS

PROVINCE OF ONTARIO,
CHIPPEWAS, MUNSEES AND ONEIDAS OF THE THAMES,
DELAWARE, July 14, 1906.

FRANK PEDLEY, Esq.,
Deputy Supt. General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my annual report concerning the three bands included in this agency for the year ended June 30, 1906.

ONEIDAS OF THE THAMES.

Reserve.—The Oneida reserve is situated in the township of Delaware, Middlesex county. It contains 5,271 acres of choice farming land.

Population.—The population of the band is 783.

Health and Sanitation.—The health of these Indians has been very good during the year; no epidemic broke out. Consumption is the most prevalent disease.

Occupations.—The principal occupation is day labour. There are a few good farmers. They have very good vegetable gardens. They earn a large amount of money from pulling flax, berry-picking, cutting wood among the whites and from employment in connection with canning factories. A good deal of money is also realized from basket and mat making.

Buildings, Stock and Farm Implements.—The dwelling-houses are principally small frame or log buildings. There are two good brick houses and one cement house. These Indians do not raise much stock, but what they have is of average breeding. Those who farm are fairly well supplied with farm implements.

Education.—There are two day schools on this reserve. The attendance has been very good, and the progress made by the children during the year has been very satisfactory.

Characteristics and Progress.—Generally speaking, the Oneida Indians are industrious and law-abiding. There are a few members of the band who are progressing very well, but as a whole their progress is slow.

Temperance and Morality.—It is to be regretted that some of the Indians occasionally use intoxicating liquors, and the marriage law is sometimes not observed as well as it ought to be.

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CHIPPEWAS OF THE THAMES.

Reserve.—This band occupies a part of the Caradoc reserve, comprising about 8,702 acres, which for the most part is a beautiful, undulating, fertile tract of country.

Population.—The population of the band is 474.

Health and Sanitation.—Sanitary precautions have been fairly well observed. No epidemic broke out during the year. Consumption is the most prevalent disease.

Occupations.—The occupations of this band are principally day labouring and farming. A good deal of money is earned by these Indians from pulling flax among the whites, and from employment in connection with canning factories.

Buildings and Stock.—The barns and stables, though generally small, are in fairly good repair. The houses are principally small log or frame buildings. There are several good brick houses. They do not raise much stock. Their horses are of fair quality.

Education.—There are three day schools on the reserve. The schools are well equipped. The attendance was fair during the year. The children who attended regularly made good progress.

Characteristics and Progress.—These Indians are usually law-abiding, and fairly industrious. They do not make much progress.

Temperance and Morality.—These Indians are usually temperate. The marriage law, I regret to say, is not observed as well as it ought to be.

MUNSEES OF THE THAMES.

Reserve.—This band occupies 2,098 acres, a portion of the Caradoc reserve.

Population.—The population of this band is 118.

Health and Sanitation.—The health of these Indians has been fairly good. No epidemic broke out during the year. Sanitary measures have been fairly well observed. Consumption is the most prevalent disease.

Occupations.—The occupations of this band are principally day labouring and farming.

Buildings, Stock and Farm Implements.—The buildings are not as good as could be desired. There is a good brick house on this reserve. They do not raise much stock. Those who farm are fairly well supplied with farm implements.

Education.—There is one day school on this reserve. The attendance was fair during the year. The children have made good progress in their studies.

Characteristics and Progress.—These Indians may be considered as fairly industrious. Their progress is slow.

Temperance and Morality.—These Indians are generally temperate, and fairly moral.

I have, &c.,

S. SUTHERLAND,

Indian Agent.

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PROVINCE OF ONTARIO,

CHIPPEWAS OF CHRISTIAN ISLAND,

PENETANGUISHENE, July 31, 1906.

FRANK PEDLEY, Esq.,

Deputy Supt. General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit the following report and statistical statement, showing the condition and progress of the Indians under my supervision during the year ended June 30, 1906.

Reserve.—The reserve of this band is located on Christian island, situated at the southern end of Georgian bay, on the steamboat route from Collingwood to Parry Sound, and from Collingwood to Midland and Penetanguishene.

Population.—The population of this band is 234, a decrease of 3 since last year.

Health.—The health of the band has been good. No contagious diseases have been prevalent. Several deaths have been caused by consumption. All sanitary regulations have been observed.

Occupations.—Farming is the occupation of most of the Indians, and those who pay attention to the work succeed fairly well. The young men act as guides to tourists in summer. Wood is taken out for the steamers. Bark is taken out and sold. Fishing is engaged in, large quantities of fine whitefish and trout being caught quite close to the island. The women are quite expert at basket-making. Taking everything into consideration, the Indians on this reserve are happy and prosperous, and make a good living without very much exertion.

Stock.—This reserve is an ideal spot for stock-raising, which the Indians have wisely taken advantage of, their cattle being the best in this vicinity, and when any are offered for sale they find ready customers.

Education.—The school is taught by the Rev. John Wilson, B.A., a graduate of Victoria University, who has great influence over the children, and they make decided advancement under his able administration. The school-house is a modern and up-to-date building in every respect.

Temperance.—As a rule the Indians are temperate, the young men particularly.

I have, &c.,

CHAS. MCGIBBON,

Indian Agent.

PROVINCE OF ONTARIO,

CHIPPEWAS OF GEORGINA AND SNAKE ISLAND,

VIRGINIA, July 2, 1906.

FRANK PEDLEY, Esq.,

Deputy Supt. General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit the following report and statistical statement, showing the condition and progress of the Indians under my supervision during the year ended June 30, 1906.

Reserve.—This reserve is located in the southern waters of Lake Simcoe, Georgina island being 2 miles from the main shore and 5 miles from Jackson's point,

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a popular summer resort, where many people spend the summer months each year. Snake island is a part of the reserve, and is 12 miles to the west of Georgina island and one mile from Merton park, another summer resort. The reserve contains 3,497 acres, and is a good clay soil, and is well adapted for raising grain and roots, and is especially adapted for raising stock.

Population.—The population of this agency is 113. There were 4 deaths and 3 births during the year. There are 33 men, 34 women and 46 young people; also about 15 non-treaty Indians that live on the reserve, and 7 members of the band who do not live on the reserve.

Health and Sanitation.—The health of the band has been fairly good during the year. There has been no epidemic prevalent during the year. Consumption caused one death, cancer one, blood poisoning one and pneumonia one during the year. The Indians use all the sanitary precautions that they can carry out, such as keeping premises clean, vaccination, &c., and all ordinary precautions are well observed. The isolation of persons suffering from consumption is not always observed.

Occupations.—About half of the Indians farm more or less, and mostly live by farming, and the rest raise vegetables. The young men work out for farmers, and river-driving in the spring, for which they get good wages. Some of the men act as guides for tourists when fishing and hunting. The old men fish and hunt, dig roots, and peel slippery elm bark, which they sell to the druggists. The women make baskets and fancy-work. There is ready sale and good prices for all they can make. There is plenty of work here for the men and good wages, but some of them do not like to work if they can get along without. Burning lime is an industry that the Indians of this band might take up with profit, as there is plenty of stone and old wood to burn it with.

Buildings.—Some of the houses are very good frame buildings, and some built of logs, which is not so good. Most of them are kept clean and tidy. The barns and stables are fairly good; three of them are frame and the rest are built of logs.

Stock.—The stock is pretty good. There are some good horses, also some good cows on the reserve, but not enough of either. There are not many sheep kept by the Indians. Hogs are more plentiful, and of a fair quality. Fowls are kept by most of the Indians.

Farm Implements.—There is a pretty good supply of implements, such as a threshing-machine, binders, mowers, harrows, ploughs, wagons, sleighs and cutters; also plenty of small tools, such as saws, axes, spades, shovels, forks and hoes, for the use of the Indians.

Education.—There is one day school on the reserve, taught at present by Mr. J. H. Prosser. All the children of school age attend school pretty regularly, and are making very good progress. The parents seem to desire their children to be educated, and send them to school dressed clean and tidy, and the children conduct themselves well while at school, and study well.

Characteristics and Progress.—Some of the Indians are making fair progress, and are pretty industrious, and are getting a little better off. This mostly applies to those that have teams. Some others are very indolent, and will not work either on their own land or for wages till forced by want, and these do not get any richer. Most of the Indians are law-abiding so far as the criminal law is concerned, but a good many of them have very little respect for civil law.

Temperance and Morality.—Most of the Indians, both men and women, are temperate; but there are a few young men and one old man that will drink if they get a chance, but for the last two years there has been very little drinking by the members of this band. With regard to other immoral conduct, the band does not stand quite so well. There is quite a number of illegitimate children born on the reserve, and a few of the Indians would live together without being married if not prevented.

General Remarks.—On the whole, the women are more industrious than the men, and in some families make a great part of the living. There are some good house-

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keepers among them. Some of those that keep their houses clean and tidy are Mrs. Albert Bigeanoe, Mrs. E. Bigeanoe, Mrs. Thomas Port, Mrs. William J. Ashquabe, Mrs. Edward Charles, jr., and Mrs. Thomas Charles.

I have, &c.,

JOHN YATES.

Indian Agent.

PROVINCE OF ONTARIO,

CHIPPÉWAS OF NAWASH.

CAPE CROKER, July 25, 1906.

FRANK PEDLEY, Esq.,

Deputy Supt. General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my annual report and statistical statement for the year ended June 30, 1906.

Reserve.—There is only one reserve in the agency. It is situated on the extreme northeast portion of the township of Albemarle, in the county of Bruce. This reserve contains nearly 16,000 acres, about sixty per cent of which is good for cultivation and pasture.

Tribe.—These Indians are nearly all Chippewas.

Vital Statistics.—This band numbers 389 on the pay-list, and about 25 non-treaty Indians, who reside on the reserve. On the pay-lists are 115 men, 119 women, 94 boys and 61 girls. There were 11 births and 4 deaths; making an increase of 6 as compared with the census of last year.

Health and Sanitation.—The health of the Indians has been good during the past year. All sanitary measures have been carefully attended to, the dwellings white-washed and the rubbish burnt up. In their personal appearance the Indians are well dressed, neat and clean, and will compare favourably with any white community in this section of the country. They are rapidly making their homes more comfortable, and building them on sanitary principles.

Occupations.—In agricultural pursuits this tribe is steadily improving, a portion of the band depend mainly on their farming, and working at timber in the winter. They are getting a large number of heavy team horses, and are steadily increasing their number of cattle, sheep and hogs. A good many fish for about one month in the fall, when the salmon trout are plentiful; the rest of the Indians work out in saw-mills, loading vessels and rafting. Some work for white farmers during the summer, and in winter in the lumber woods. The Indian women are industrious, make baskets and pick berries; they raise poultry and attend to their gardens, nearly all staying at home.

Education.—There are three day schools on this reserve, and good progress is being made in all of them. The school buildings are being repainted and repaired, and are kept in good order and well equipped, being supplied with good teachers.

Temperance and Morality.—A large number of the band are strictly temperate, and have temperance societies. A few of them give trouble when they go to town by managing to get whisky, but they are getting better in this respect. When they have no money, there is no trouble about their getting liquor. In regard to morality, there is a decided improvement, and the finger of scorn is pointed at those who drink and act immorally.

Characteristics and Progress.—The industrious Indians are getting along well, and are making a good living, and their progress on the whole is fair.

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Religion.—There are two churches on the reserve. The Methodist church is a large stone structure. It is looked after by the Rev. John Nelson, and has over 200 adherents. The Roman Catholic church is a frame structure, rather small in size, and has been in use for more than twenty years. The congregation intends to build a new stone church in the near future, on modern architectural principles. There are about 150 adherents. Their spiritual welfare is zealously attended to by Rev. Father Cadot. Nearly all the Indians take a deep interest in religious matters.

I have, &c.,

JOHN McIVER,

Indian Agent.

PROVINCE OF ONTARIO,

CHIPPEWAS OF RAMA,

ORILLIA, July 18, 1906.

FRANK PEDLEY, Esq.,

Deputy Supt. General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my annual report and statistical statement, showing the condition and progress of the Indians of my agency for the year ended June 30, 1906.

Reserve.—The Rama reserve is situated on the eastern shore of Lake Couchiching, opposite the town of Orillia. The reserve comprises an area of 2,000 acres of fairly good farming land.

Population.—The population of the Rama reserve is 236.

Health and Sanitation.—The health of the Indians generally has been fair. Consumption is the cause of death in most cases. In the spring all garbage is carefully removed, and vaccination and other sanitary precautions are carefully observed.

Occupations.—Agriculture is the chief industry. Of late years on account of the increasing number of tourists the young men of the reserve earn good wages acting as guides. Indian baskets and bead-work are also more in demand. During the fall and winter months steady employment can be had in the lumber camps in the north.

Buildings, Stock and Farm Implements.—The buildings on the reserve are mostly frame. All are neat and clean and kept in fairly good repair. Their stock is not up to the average run of Canadian stock of to-day. Their implements are not of modern type.

Education.—The school-room, situated beneath the council chamber, is bright, clean and well ventilated. Their teacher, Rev. J. Lawrence, shows increasing zeal in both the moral and intellectual education of the children. The average attendance for this year far surpassed other years, and the children made good progress.

Characteristics and Progress.—Although we have a few miscreants, the majority of the Rama Indians are peaceable and law-abiding. A few of the Indians seem to make but little progress, but as a whole the advancement of the band is fair.

Temperance and Morality.—The great majority of the band are temperate, and public sentiment strongly condemns any indulgence in intoxicants or immoral conduct. In spite of this, Rama has a small minority who, when they get an opportunity, indulge freely in liquor.

I have, &c.,

D. J. McPHEE,

Indian Agent.

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PROVINCE OF ONTARIO,
CHIPPEWAS OF SARNIA,
SARNIA, September 10, 1906.

FRANK PEDLEY, Esq.,
Deputy Supt. General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my annual report of matters in my agency up to the close of the fiscal year ended June 30, 1906.

Reserves.—There are three reserves in my agency, Sarnia reserve, situated on St. Clair river south of the town of Sarnia, comprising 4,943 acres, and Kettle Point and Stony Point reserves, situated on the southern shore of Lake Huron, comprising 4,779 acres.

Population.—The population is as follows: Sarnia reserve, 340; Kettle Point reserve, 52; Stony Point reserve, 40.

Health and Sanitation.—The health of the Indians generally is good. No epidemic has been prevalent during the year. The cleaning up of houses and premises in the spring is looked after fairly well. Vaccination is performed whenever necessary.

Occupations.—Farming, fishing and labouring are the actual occupations of the Indians.

Buildings.—In most cases the buildings are comfortable and commodious.

Stock.—Stock is not raised extensively.

Farm Implements.—The Indians are fairly well provided with good, up-to-date implements.

Education.—There is one school on the Sarnia reserve and one on Kettle Point reserve. The parents in most cases try to send their children to school.

Characteristics and Progress.—In a good many cases the Indians are industrious and law-abiding; consequently their circumstances are improving.

Temperance and Morality.—Drunkenness prevails to a certain extent, especially among the younger Indians; but the majority of the Indians generally are sober, moral people.

I have, &c.,

A. ENGLISH.
Indian Agent.

PROVINCE OF ONTARIO,
GOLDEN LAKE AGENCY,
KILLALOE STATION, July 9, 1906.

FRANK PEDLEY, Esq.,
Deputy Supt. General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my annual report for the year ended June 30, 1906.

Reserve.—This reserve is situated on the southern end of Golden lake, Renfrew county.

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Tribe.—These Indians belong to the Algonquin tribe.

Vital Statistics.—During the past year there was an increase of 4 in the band under my care. There was 1 death, an old man that died on the 7th of this month, leaving the population of this band, 101.

Health and Sanitation.—The health of the Indians on the Golden Lake reserve is good. Their houses are kept pretty clean, and I think they compare favourably with any other class in that respect.

Occupations.—The principal occupations of these Indians are working in the lumber camps in winter and on the drives in the spring. Very few of them farm, as most of them are young men and can make more money working out, and only a few of the old men try to farm now.

Education.—The children in this school are progressing rapidly under the management of Miss Casey, who is a very good teacher.

Religion.—The Indians on this reserve are all Roman Catholics.

Temperance.—I cannot say these Indians are all temperate, for most of them will drink liquor if they get it; but must say most of them are temperate. It would be too good to expect them all to be temperate.

I have, &c.,

MARTIN MULLIN,

Indian Agent.

PROVINCE OF ONTARIO,

GORE BAY AGENCY,

GORE BAY, June 30, 1906.

FRANK PEDLEY, Esq.,

Deputy Supt. General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my annual report concerning the Indians of this agency for the year ended June 30, 1906.

COCKBURN ISLAND BAND.

Reserve.—This reserve is situated on the northwestern side of Cockburn island, which lies immediately west of Manitoulin island. It has an area of about 1,250 acres.

Population.—This band has a population of 53.

Health and Sanitation.—The health of the band is generally good, no epidemics having made any depredation on the reserve. The sanitary regulations are observed and appreciated.

Occupations.—Forest, farm and stream are the resources of these Indians. They farm on a small scale, and have very good garden and root crops. Their principal occupations are working in the lumber camps and making ties and posts in the winter, and loading boats and peeling ties and posts in the summer.

Buildings, Stock and Farm Implements.—Their buildings are neat, clean and comfortable, and fairly well furnished. Their construction shows considerable skill and adaptability to requirements. They have some cattle and horses and other stock. The implements and vehicles they buy are good.

Education.—There is no school on the reserve, but an arrangement has been made for the children to be educated at Wikwemikong industrial school.

Characteristics and Progress.—These Indians are sober, industrious and law-abiding, making a good living by their thrift.

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Temperance and Morality.—The absence of liquor on the island has a good effect, and their isolation has kept them in their primitive state of morality, which is above the average.

General Remarks.—These Indians are industrious, sober and moral, adapting themselves more and more to the ways of the white man, and are inclining more to agricultural pursuits and the manufacture of timber.

WEST BAY BAND.

Reserve.—This reserve lies in the township of Billings, at the head of Honora bay, Manitoulin island, and comprises in all 13 square miles. The soil is sandy and clay loam, producing good crops; it is timbered with hardwoods, with patches of cedar and other soft woods.

Population.—This band numbers 338.

Health and Sanitation.—Sanitary measures are being fairly well carried out. The houses are neat and clean, and whitewashed outside and in. The deaths that have occurred were with two exceptions from natural causes. No epidemic made an appearance.

Resources and Occupations.—The chief occupation of these Indians is farming, in which they make good progress. Some 25 or 30 families reside permanently on their farms and are making good progress. Their seeds are well selected, and adapted to the locality and requirements. They also work in the lumber camps in winter, and load vessels and peel ties and posts in the summer. Sugar-making, berry-picking and fancy wares are also sources of revenue.

Buildings, Stock and Farm Implements.—The buildings are mostly of logs, neat and clean. There is a marked improvement in the furnishings of the houses; nearly every house has a sewing-machine, and organs and other musical instruments are in many homes. Their stock of cattle and horses is increasing both in number and quality. The implements purchased are modern, and are being well cared for.

Education.—A fine school has been erected in West Bay village. Many of the pupils read and write well, both in Indian and English. In addition to the regular school courses, sewing and making of all kinds of clothing is taught.

Characteristics and Progress.—These Indians are industrious and law-abiding as a rule. They are copying the white settlers in many respects, and are doing away with the old Indian ways of living.

Temperance and Morality.—Along these lines there is an improvement. No complaints are made excepting for intemperance.

General Remarks.—This band is progressive. Following the lead of the white settler and agriculturist, they are improving their lands and repairing the roads. The past season yielded an abundant return in grain, hay and root crops. The winter was mild, so that all kinds of stock wintered well, the increase being strong and hearty. The Indians are well dressed, and drive good vehicles and horses.

OBIDGEWONG BAND.

This band consists of only seven persons. Their reserve is situated on the west shore of Lake Wolseley, Manitoulin island. The area is about 400 acres. Some of it is exceptionally well timbered with hardwood. The members of this band depend largely on the soil for maintenance. They are good bushmen, and in the winter make ties and posts and in the summer earn quite a sum peeling ties and posts and loading vessels.

SHESHEGWANING BAND.

Reserve.—This reserve is situated in the northeast part of the township of Robinson, Manitoulin island. Its area is about 5,000 acres, fairly well timbered with hardwood, cedar and spruce.

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Population.—This band numbers 161.

Health and Sanitation.—The health of this band is poor. The sanitary regulations are well carried out, and the houses are neat and clean. Their clothing is well made and adapted to their work.

Occupations.—Farming and gardening are their chief occupations. Some 16 families reside permanently on their farms, cultivating the land and raising stock. Others are employed in the lumber camps and loading vessels.

Building, Stock and Implements.—Their buildings are mostly of logs hewed outside and in, and whitewashed. They are kept clean and neat, some being well furnished with musical instruments, sewing-machines and other luxuries. Their stock is well cared for; cattle, horses and pigs are numerous. The implements used are modern; covered buggies, democrats and wagons are in general use, and a threshing-machine is owned by the band.

Education.—The school is well attended. Good work is being done, not only in teaching the usual courses, but practical housework. The cutting out and making of clothing is taught the girls, and some of the work shows unusual skill.

Characteristics and Progress.—Those of the band who are farmers are doing well, but need more cleared land. Their children are the best educated, and appear to have more inclination to steady pursuits.

Temperance and Morality.—As a whole, the band is fairly temperate. Some families are rather unsettled, but appear to be improving.

General Remarks.—Some of the Indians of this band are good farmers. The Sampsons and Negonneuwenahs have erected good houses, where they reside permanently. The past year was very favourable for crops of all kinds, and the mild winter contributed to the increase and maintenance of their stock. By thrift and industry these Indians keep themselves well provided with money.

I have, &c.,

ROBERT THORBURN,

Indian Agent.

PROVINCE OF ONTARIO,

MANITOWANING AGENCY,

MANITOWANING, June 30, 1906.

FRANK PEDLEY, Esq.,

Deputy Supt. General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit the following report concerning the Indians of this agency for the year ended June 30, 1906.

WHITEFISH RIVER BAND.

Reserve.—The reserve of this band is situated near the mouth of the Whitefish river, on the north shore of the Georgian bay. It contains an area of about 10,600 acres. A large portion of the land is suitable for agriculture; the remainder is woodland.

Population.—This band has a population of 90.

Health and Sanitation.—The health of these Indians has been very good. Sanitary measures are very well observed. Their dwellings and outbuildings have all been freshly whitewashed.

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Occupations.—The occupations engaged in by these Indians are farming, lumbering, hunting, berry-picking, fishing, basket-making and sugar-making.

Buildings.—Their buildings are of log and frame construction, and are kept in a fair state of repair.

Stock.—They have very little stock, but what they have is of the average quality and well cared for.

Farm Implements.—These Indians have very few farm implements, but what they have are quite ample for their requirements.

Education.—There is a day school on the reserve, which is fairly well attended by the children who live on the reserve. The progress of the pupils is not what it should be, owing to the very irregular attendance of the scholars, which is due to the parents' neglect to send their children regularly to school.

Characteristics and Progress.—Generally speaking, the Indians of this reserve are law-abiding and industrious. They are not making as good progress in agricultural pursuits as is desirable, but on the whole are progressive.

Temperance and Morality.—Temperance is well observed, and the morals of the Indians are good.

POINT GRONDE BAND.

Reserve.—This reserve is located east of Collins inlet, on the north shore of the Georgian bay. It contains an area of 10,100 acres. A portion of this reserve is suitable for agricultural purposes; the remainder is woodland.

Population.—The population of this band is 49.

Health and Sanitation.—The health of this band has been very good during the past year. Sanitary precautions have been well observed, and these Indians are clean in their habits and dwellings.

Occupations.—These Indians farm on a very small scale, fish, hunt, pick berries in the summer, work at the lumber mills, load barges; and work in the lumber camps in winter.

Buildings.—They have very comfortable log dwellings, which they keep in a good state of repair.

Stock.—These Indians have very little stock.

Farm Implements.—They have very few farm implements.

Education.—There is no school on this reserve. The children attend school at Wikwemikong.

Characteristics and Progress.—These Indians are industrious and law-abiding, and are making very good progress, but they do not give as much attention to tilling the soil as is desirable.

Temperance and Morality.—Temperance is very well observed, and the morality of these Indians is excellent.

WHITEFISH LAKE BAND.

Reserve.—The reserve of this band is situated about 12 miles from Sudbury, on the Algoma branch of the Canadian Pacific railway, where there is a station called Naughton. This reserve has an area of 43,755 acres. A large portion of the reserve is suitable for agriculture.

Population.—This band has a population of 169.

Health and Sanitation.—The health of the Indians of this band for the year has been good, and all the residents of the reserve have been successfully vaccinated.

Occupations.—They plant small gardens, fish, hunt, act as guides to prospectors, and work in the lumber and mining camps.

Buildings.—Nearly all their buildings are constructed of logs, and they are kept in a fair state of repair.

Stock.—They have very little stock.

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Farm Implements.—They have but few farm implements.

Education.—There is one day school on this reserve, which is in charge of a competent teacher, and the children that reside permanently on the reserve and attend school regularly are making fair progress, but the parents take very little interest in the education of their children.

Characteristics and Progress.—They are fairly industrious and intelligent, but take very little interest in agricultural pursuits. A large number of them devote their whole time to hunting.

Temperance and Morality.—They are fairly temperate, and are moral in other ways.

TAHGAIWININI BAND.

Reserve.—These Indians have a reserve at Wahnipitae, on the north shore of Georgian bay, but nearly all of the band reside on the unceded portion of Manitoulin island, at or near Wikwemikong. Their reserve contains an area of 2,560 acres, which is all wild land.

Population.—This band has a population of 196.

Health and Sanitation.—The health of these Indians has been good. Sanitary measures have been very well observed. Their dwellings present a clean and tidy appearance.

Occupations.—Farming, lumbering, fishing, berry-picking, basket-making and fancy bark-work are the chief occupations of this band.

Buildings.—Their buildings are of log and frame construction, and are kept in a good state of repair.

Stock.—Their stock is of the average quality, and well cared for.

Farm Implements.—They have an ample supply of the most modern farm implements.

Education.—The children of this band attend school at Wikwemikong.

Characteristics and Progress.—These Indians are industrious and law-abiding, and are making steady progress.

Temperance and Morality.—These Indians are fairly temperate, and moral in their habits.

MAGANETTAWAN BAND.

The members of this band, who reside on the Manitoulin island, number 42. They live at West Bay, and on the unceded portion of Manitoulin island, where they successfully farm and garden. In the winter they find employment in the lumber camps. This reserve, together with the affairs of its Indians, is under the control of the Parry Sound superintendency.

SPANISH RIVER BAND, DIVISION NO. 3.

The members of this band number 358. They reside on the unceded portion of Manitoulin island. Their general measure of advancement is identical with that of the Indians of the unceded portion of Manitoulin island, with whom they are included in the agricultural and industrial statistics.

SUCKER LAKE BAND.

Reserve.—The reserve of these Indians is principally situated in the fourth concession of the township of Assiginack, Manitoulin island. The area of this reserve is 599 acres.

Population.—The population of this reserve is 13.

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Health and Sanitation.—The health of these Indians for the past year has been good, and sanitary precautions are encouraged in every respect.

Occupations.—Farming is the only occupation carried on by these Indians.

Buildings.—Their buildings are in good condition, and kept neat and clean.

Stock.—Their stock is of the average quality, and well cared for.

Farm Implements.—They are fully equipped with agricultural implements.

Education.—There is no school on this reserve, and there are no children of school age in this band.

Characteristics and Progress.—They are both steady and industrious, and are getting along well.

Temperance and Morality.—Their character in these respects is altogether satisfactory.

SUCKER CREEK BAND.

Reserve.—This reserve is situated in the northern part of the township of Howland, about 4 miles from the town of Little Current. It has an area of 1,665 acres. A large portion of this reserve is first-class farming land; the remainder is timber and grazing land.

Population.—The population of this band is 103.

Health and Sanitation.—The health of these Indians during the past year has been very good, and all their dwellings have been thoroughly cleaned and whitewashed.

Occupations.—Their principal occupation is farming. Some of them engage in getting out timber and loading vessels.

Buildings.—Most of these Indians have good dwellings and barns and stables, which compare favourably with those of their white neighbours.

Stock.—Their stock is of the average quality, and is well looked after.

Farm implements.—They have all kinds of modern farm implements.

Education.—These Indians have a school on the reserve. The children attend fairly well, and are making fair progress in their studies.

Characteristics and Progress.—As a rule these Indians are industrious and law-abiding. They are progressing very favourably.

Temperance and Morality.—They are fairly temperate, and up to the standard in morality.

SHEGUIANDAH BAND.

Reserve.—This reserve lies in the northwestern part of the township of Sheguiandah. It contains an area of 5,106 acres. A large portion of this reserve is suitable for farming; the remainder is grazing land.

Population.—This band has a population of 100.

Health and Sanitation.—The health of these Indians for the past year has been good. They are quite amenable to sanitary requirements.

Occupations.—The principal occupation of these Indians is farming. Sugar-making, basket-making and berry-picking are also engaged in, and the Indians also find employment in loading lumber barges at Little Current during the summer season.

Buildings.—The buildings of these Indians are well constructed, and are fairly well furnished.

Stock.—They have very little stock.

Farm Implements.—They have all the farm implements necessary for their requirements.

Education.—These Indians have a good day school on the reserve. It is in charge of a competent teacher, and the parents seem to take an active interest in the education of their children.

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Characteristics and Progress.—The majority of these Indians are industrious, and are progressing favourably.

Temperance and Morality.—In these respects their conduct is excellent.

SOUTH BAY BAND.

Reserve.—These Indians occupy a portion of the unceded part of Manitoulin island. They number 67. Their general measure of advancement is identical with that of the Indians of Manitoulin island unceded band, with whom they are included in the agricultural and industrial statistics.

INDIANS OF MANITOULIN ISLAND, UNCEDED.

Reserve.—This reserve comprises the eastern end of Manitoulin island, east of the township of Assiginack. It contains an area of about 105,000 acres.

Population.—This band has a population of 662.

Health and Sanitation.—The health of these Indians generally for the past year has been very good. No contagious disease other than consumption has visited the reserve. The majority of their houses are kept neat and clean, and are comfortably furnished. All necessary precautions have been taken in respect to cleaning their premises and whitewashing their dwellings.

Occupations.—Many of these Indians are learning to follow farming on an intelligent scale. Fishing is also followed by some of them. Last winter they took out under permits 25,000 cedar railway ties and 10,000 posts, all of which the department sold for them at the highest market prices.

Buildings.—Their log and frame dwelling-houses are generally very comfortable, commodious, and neatly and carefully constructed. Their barns and other outbuildings are kept in a fair state of repair.

Stock.—Their stock in general is in good condition, and some of these Indians have valuable animals.

Farm Implements.—They are equipped with all kinds of modern farm implements.

Education.—Facilities for education are within easy reach of all children of school age on the reserve. The boys' and girls' industrial institutions and boys' and girls' day schools at Wikwemikong are conducted by a well qualified staff of teachers. There are also day schools at Wikwemikonsing and South Bay.

Characteristics and Progress.—Most of these Indians are hard-working and industrious, and are up to the standard of advancement. Their chief is a good man, who seems to take a lively interest in all things pertaining to the welfare of his people.

Temperance and Morality.—There are a few who indulge in strong drink, but on the whole these people may be said to be temperate and moral.

I have, &c.,

C. L. D. SIMS,

Indian Agent.

SESSIONAL PAPER No. 27

PROVINCE OF ONTARIO.

MISSISSAUGAS OF ALNWICK.

ROSENEATH, July 3, 1906.

FRANK PIERCE, Esq.,

Deputy Supt. General of Indian Affairs.

Ottawa.

SIR,—I have to submit the following report concerning the Alnwick Indians for the year ended June 30 last, but to my report last year I have very little to add.

Reserve.—The reserve comprises about 3,308 acres in the township of Alnwick, in the county of Northumberland. It also contains Sugar and Hickory islands, in Rice lake, the former 100 acres and the latter about 10 acres. Of the cleared lands on the reserve, about 1,700 are rented to white men.

Population.—The band numbered 240 last spring when I took the census, being an increase of 8 over last year.

Health.—The health of the members of the band is good. We have only one case of sickness (consumption).

Occupations.—Seven families are farming, and doing very well by selling fat hogs, milk to cheese factories, as well as selling grain and stock such as horses and cattle. Those not engaged in farming earn their living by labouring for white men, and working on the rivers in the summer and in the lumber woods in the winter. There is very little made by fishing or hunting, and none pretend to make a living by either of these, but merely do a little fishing and hunting occasionally.

Buildings, Stock and Farm Implements.—All the buildings on this reserve with few exceptions are frame, and on the whole well kept both inside and out. The stock is very good and on the whole well kept. The machinery used by those farming is up to date.

Education.—The progress of the school on the reserve during the past year has been good compared with previous years. Mr. F. G. Jobblin, the teacher, is without doubt an up-to-date teacher, and the children as well as their parents are very much pleased with him.

Characteristics and Progress.—The Indians have been doing a large amount of fencing during the past two seasons of cedar rails and stakes, chiefly built of the Wertenman pattern, and they are really first-class fences, and on the whole the Indians are doing fairly well. No new land has been broken or cleared during the past year; in fact there is but little to clear.

Temperance and Morality.—In general the Indian women are well behaved, but there are a few exceptions. A number of the young men will drink liquor whenever they can get it, and several have been fined during the past winter, but they will not tell from whom they obtain it—they will go to jail rather than do so—consequently it is very difficult to get a conviction of a white man who supplies the liquor to them.

I have, &c.,

J. THACKERAY,

Indian Agent.

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PROVINCE OF ONTARIO,

MISSISSAGUAS OF THE CREDIT,

HAGERSVILLE, July 3, 1906.

FRANK PEDLEY, Esq.,

Deputy Supt. General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my annual report of the Mississaguas of the Credit reserve for the year ended June 30, 1906.

Reserve.—The reserve is situated partly in the township of Tuscarora, county of Brant, and partly in the township of Oneida, county of Haldimand. It comprises 6,000 acres, of which 4,800 are in Tuscarora and the remaining 1,200 in the township of Oneida. The reserve is adjacent to and lies to the south and east of the Grand River reservation. The greater part of this reserve is good tillable land, with very little timber, and about two-thirds under cultivation.

Population.—The population of this reserve is 261.

Health and Sanitation.—The health of this band has been good during the past year. A large majority of the habitations are clean and orderly. The reserve is divided into five sections. The chief and each councillor look after a section, and see that all sanitary measures are faithfully attended to.

Occupations.—The principal occupation of this band is farming. Many of the farms are well cultivated. The crops for the past year were generally good. Quite a number of men and women spend the summer in the fruit-growing districts of southern Ontario, where they get good wages, and return to the reserve for the winter. A number of the men work in the stone quarries at Hagersville nearly the whole year round.

Buildings.—There has been very little improvement in the buildings on this reserve during the past year. A majority of the dwellings and outbuildings are a credit to the band.

Stock.—The stock consists of horses, cattle and swine, and there has been very little improvement during the year.

Farm Implements.—Nearly all kinds of modern machinery for farming purposes are used on this reserve.

Education.—The children are nearly all taught in one school about the centre of the reserve by Miss L. Mitchell, who is doing very good work among them. A small number attend one of the Six Nation schools adjoining this reserve. The children are progressing favourably.

Characteristics and Progress.—Most of these Indians are progressing slowly. Many of them have improved their holdings by erecting good wire fences. There is no timber for rails.

Temperance and Morality.—A large majority of the Indians are temperate. Some few male members of the band use liquor to excess, and these are consequently shiftless and idle. In other respects the morality of the band is very good.

I have, &c.,

W. C. VAN LOON,

Indian Agent.

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PROVINCE OF ONTARIO,
MISSISSAGUAS OF RICE AND MUD LAKES.
KEENE, June 30, 1906.

FRANK PEDLEY, Esq.,
Deputy Supt. General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my annual report on Indian affairs in my agency for the year ended June 30, 1906.

RICE LAKE BAND.

Reserve.—The Rice Lake reserve is located on the north shore of Rice lake, in the township of Otonabee, county of Peterborough. It contains about 1,860 acres, of which about 855 are cleared; about 188 acres of this is under lease to white tenants, while the locatees cultivate the remainder of said cleared land.

Population.—The total population shown by the present census is 87.

Health and Sanitation.—The health of the members of this band has been very good, there having been but one death during the year.

Occupations.—The occupations are gathering wild rice and trapping. A number of the men work in the lumber camps in winter, and others work their locations.

Buildings, Stock and Farm Implements.—Nearly all the buildings on this reserve are frame, and are fairly well kept. The majority of the Indian women keep their homes clean and tidy. The stock is mostly good, and in many cases well kept, and those who farm have all the modern machinery.

Education.—The children are making fair progress in their studies. They attend the public school with the white children, and have at present Miss Doris as their teacher.

Temperance and Morality.—The greater number of these Indians are temperate, and very well behaved and law-abiding.

MUD LAKE BAND.

Reserve.—This reserve is located on the shore of Mud lake, in the township of Smith, county of Peterborough. It contains 2,000 acres, of which more than 300 is cleared.

Population.—The total population shown by the present census is 185.

Health and Sanitation.—During the past year the health of the members of this band has been fairly good. Sanitary measures are very well observed.

Occupations.—In agricultural pursuits very steady improvement is being made by some of the members of this band. There are also a number of them who work in the lumber camps in the winter, and spend the summer rowing tourists on the lakes.

Buildings, Stock and Farm Implements.—The buildings, with the exception of the hall, are of log and frame, and are kept in good repair. The stock is mostly good, and in many cases well kept; and those who farm have all the modern machinery.

Education.—The school-room is situated under the public hall, and is roomy, bright and well ventilated. The teacher, Mr. McCue, shows persistent zeal in the education of his pupils, and those who attend regularly make good progress.

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Characteristics and Progress.—Some of these Indians are very industrious, and are making some progress. Those that farm most get along best. Some of them take matters easy; others provide ahead like white people and improve their farms and buildings.

Temperance and Morality.—Most of the members of this band are moral, and with a few exceptions are temperate.

I have, &c.,

WM. McFARLANE,

Indian Agent.

PROVINCE OF ONTARIO,

MISSISSAGUAS OF SCUGOG,

PORT PERRY, August 6, 1906.

FRANK PEDLEY, Esq.,

Deputy Supt. General of Indian Affairs,
Ottawa.

SIR,—I have the honour of submitting my annual report and tabular statement for the year ended June 30, 1906.

Reserve.—The reserve of the Mississaguas is situated on the northwestern portion of the township of Scugog, in Lake Scugog, about 8 miles from Port Perry. It contains 800 acres, 60 of which consists of woodland and pasture, the remaining portion being highly adapted for grain-raising. About 500 acres is rented to the whites.

Population.—The total population of this band is 35.

Health and Sanitation.—The health of the Indians is good. One case of diphtheria was reported during the year, but extra precaution was taken to isolate the patient, and so prevent spreading of the disease. The women are careful about their homes, and keep everything neat and clean.

Occupations.—The young men are engaged as farmers and farm-hands, but the older members fish and hunt. Game is scarce here; there being a three-year close season in fish, they have to go to the north lakes. While not engaged in their house duties, the women make baskets.

Buildings, Stock and Farm Implements.—The Indians have good modern homes, only one of the old log type remaining. The quality or quantity of live stock does not improve much. The farm implements are good, but not too well cared for.

Education.—The school in the village, although not separate to the Indian, is conducted by a good teacher. The parents are showing increased interest in having their children better educated.

Characteristics and Progress.—The younger generation is industrious and willing, but they seem to work better for others than for themselves.

Temperance.—Occasionally the older members give way, but cases of intemperance are rare.

I have, &c.,

A. W. WILLIAMS,

Indian Agent.

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PROVINCE OF ONTARIO.

MOHAWKS OF THE BAY OF QUINTE.

BELLEVILLE, July 7, 1906.

FRANK PEDLEY, Esq.,

Deputy Supt. General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my annual report for the year ended June 30, 1906.

Reserve.—The Mohawk reserve, in the township of Tyendinaga, in the county of Hastings, which reaches from the town of Deseronto on the east to the township of Thurlow on the west, and borders on the north shore of the bay of Quinté, contains in round numbers about 17,000 acres of land. The greater part of this reserve is good tillable land under cultivation; the remaining part consists of pasture lands partly timbered with second-growth trees and scrubby bushes and shallow plains and marshes.

Population.—The population of this band is now 1,319.

Health and Sanitation.—The general health of the Indians of this band has been good all through the past year. No outbreak of any contagious disease has occurred. The mild winter and scarcity of snow rendered the winter more tolerable than the preceding two.

Resources and Occupations.—The principal occupation of the Indians on this reserve is farming. The land is strong and productive when well cultivated, and some of the farms are kept in a first-class state of cultivation, while others are badly tilled and full of foul weeds and badly drained. Many of the fences are out of repair, and others that are needed are wholly gone.

Some sixty odd white people have leases on the Indian lands, and most of the lessees reside on the reserve. The rents received from the tenants are in part applied on improvements to the buildings and fences, and the rest goes towards living expenses of the locatees, together with the wages earned in the mills and factories at Deseronto and elsewhere. One Indian girl is teaching in one of the schools on the reserve, and quite a few girls are out at service.

The crops on the reserve were good last year, except potatoes, which rotted badly. The grass and grain look fine so far this season, and there is good reason to expect an abundant harvest.

The Bay of Quinté Mohawk Agricultural Association, established three years ago on the reserve, has held three very successful fairs on the grounds at the council-house, and the interest in this enterprise seems to be well maintained. The stock and products exhibited at these fairs compare favourably with such exhibits of the whites in the surrounding townships.

Buildings.—A few new buildings have been put up, and many houses and out-buildings have been repaired, and many others need repairs badly.

The elegant parish stone church, which had stood on the beautiful site for over sixty-four years and been the joy and pride of the Mohawks on this reserve, was struck by lightning about 7 o'clock on Saturday night, May 12, 1906, and thereby set on fire and destroyed. This handsome church had been thoroughly repaired both inside and outside in the year 1904, and a new furnace, carpet and stained window put in. The Indians feel the loss of this church keenly, but have resolved to rebuild on the same site as soon as possible this year.

Stock.—The horses and cattle on this reserve are chiefly of mixed breeds, and of a very good quality.

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Dairying is a most important industry in the county of Hastings. Many of the Indians send their milk to the cheese factories. The cows are well cared for, and the milk is carefully attended to and sent to the factories in good condition.

Pigs are raised by many, and sold at a good profit.

Farm Implements.—All kinds of modern implements are used on the reserve, as well by the Indians as by the white tenants.

Education.—There are four public schools on this reserve, and some Indian children go to schools adjoining the reserve. One school on the reserve is taught by an Indian girl, the other three schools by white girls. The attendance and progress of the children is fairly good. Each school-house needs repairs, both inside and outside this season, and better equipment for teaching should be provided.

Characteristics and Progress.—The sober and industrious Indians are law-abiding, and are bettering their circumstances and properties; but some of the indolent and dissipated are getting more miserable and destitute as they advance in years. The members of this band taken altogether are making progress in all lines of civilization.

A rifle range has been authorized on the reserve, and a goodly number of the young men are getting ready for practice; in fact over thirty young men are members of volunteer companies, some rifle and some horse.

Temperance and Morality.—Some few members of this band still use liquor at times to excess, and their means is thus wasted, not only for the liquors but in paying fines and costs where they do not go to prison; but the great majority of the members of the band are temperate in their habits, and quite a few are teetotalers.

Most of the adult members attend church somewhere on Sundays, and the children go to Sunday school. The morality of this band is reasonably good, except in payment of debts, when first due many come short.

I have, &c.,

WM. R. AYLSWORTH.

Indian Agent.

PROVINCE OF ONTARIO.

MORAVIANS OF THE THAMES,

DUART, August 21, 1906.

FRANK PEDLEY, Esq.,

Deputy Supt. General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my annual report of the Moravians of the Thames for the year ended June 30, 1906.

Reserve.—The Moravian reserve is situated in the northern part of the township of Orford, county of Kent, on the south side of the Thames river, about midway between Bothwell and Thamesville, and contains 3,100 acres.

Population.—The total population as per last census is 332, one more than last year.

Health and Sanitation.—The health of the Indians has been fairly good during the year. Their houses and premises are kept clean, and sanitary laws are being better understood and observed.

Occupations.—The members of this band live principally by farming, and working out among the white people, where they obtain good wages, and they sometimes neglect their own farms. A few make baskets and mats, while others trap and fish successfully.

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Buildings and Stock.—There was not much improvement in buildings this last year, but their stock is showing marked improvement over former years.

Education.—There is but one school, where all the children attend, and are efficiently taught by a lady teacher, one pupil passing the entrance examination for high school; others might have, but would not try.

Characteristics and Progress.—The Indians are gradually improving their farms, chiefly this year by building wire fences, which add much to the appearance of their holdings. Their roads are in first-class condition under the supervision of eight path-masters.

Their agricultural society, of which they are very proud, has again proved a great success in exhibits and financially, and would compare favourably with any township show. About 5,000 people attended the fair last year. Forty-two of the braves attended camp at London this year, and are expert with the rifle and in drill.

Temperance and Morality.—They are not as temperate as they should be, but are not habitual drinkers. They are fairly moral, and are as law-abiding as any people.

I have, &c.,

A. R. McDONALD,

Indian Agent.

PROVINCE OF ONTARIO,
OJIBBEWAS OF LAKE SUPERIOR, EASTERN DIVISION,
SAULT STE. MARIE, June 30, 1906.

FRANK PEDLEY, Esq.,
Deputy Supt. General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my annual report for the year ended June 30, 1906, of Sault Ste. Marie agency, embracing Garden River, Batchawana and Michipicoten bands of Indians.

GARDEN RIVER BAND.

Reserve.—This reserve is situated about 6 miles east of Sault Ste. Marie, on the north bank of the St. Mary's river. Root river, Garden river and Echo river, with their tributaries, pass through this reserve. It is traversed from east to west by the Canadian Pacific railway, running parallel to the shore of the St. Mary's river. The inhabited portions of the reserve are confined to the banks of the river, and extend a short distance inland, from one-half mile to a mile and a half. The remainder of the reserve is timbered with mixed timber. A portion of it is rough and rocky; other portions of it consist of arable land. Minerals of different kinds have been discovered thereon. The reserve comprises about 29,000 acres.

Population.—During the past year there have been 12 births and 13 deaths in this band. Three members of Sucker Creek band have been transferred, and there has been an increase of 2 by marriage. A decrease of 1 by marriage leaves the number of Indians in the band the same as at the end of last year, viz., 454.

Health and Sanitation.—The health of this band during the past year has been reasonably good. In January, 1906, there was an outbreak of scarlet fever, but, by reason of close attention to quarantining, only one family was affected by it. No deaths resulted from the disease. There are a number of cases of consumption among the band, a disease which appears to be working insidiously amongst its members.

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Occupations.—A large number of this band cultivate small plots of land on the reserve along the shores of the river, and also raise some stock. Very little of what may be called farming is engaged in. The coarser grains, roots and vegetables are cultivated to some extent, in small quantities. A large number of the men are employed in the lumber woods, where they command good wages. During the past winter a number of the Indians took out ties and timber under contract, the former for the Harris Tie Company, the latter for the Echo Bay Lumber Company, receiving good prices for the result of their work. Sugar-making in the spring, and berry-picking in the summer are engaged in considerably. The women employ a great deal of their time in making baskets and other articles, for which they obtain fair prices. In the summer, many of the men are employed by surveying parties as guides and as canoemen.

Buildings.—The majority of the dwellings are of log, although a good number of small frame buildings have been erected. The buildings are generally whitewashed, and many of them present a very neat appearance. The only public buildings are the council-house (a two-story building) and a small lock-up.

Stock.—Most of the stock on the reserve, consisting of horses, cattle and some swine, is of an inferior quality. No sheep appear to be raised on this reserve. There is plenty of room for improvement in the breeding of their stock.

Farm Implements.—Farm implements consist of the usual implements and a few mowing-machines.

Education.—Two day schools are situated on this reserve, under the Roman Catholic and Anglican Churches. The latter is in charge of Mr. Lucius F. Hardiman, who has been very successful in bringing the school up to a fair average position; and a marked interest is being taken by the pupils in their work. The Roman Catholic school is in charge of the Rev. J. A. Drolet, S.J., and the pupils appear to be making fair progress.

Characteristics and Progress.—Like most bands of Indians, some members are industrious, while others are careless and improvident.

Temperance and Morality.—Owing to the proximity of the reserve to the American side and to the towns of Sault Ste. Marie, Ontario, and Sault Ste. Marie, Michigan, a number of the band obtain and partake of considerable liquor. Several convictions of members of the band for drunkenness have been made during the past year. Some of these have been fined; others imprisoned for short terms. In the majority of cases, the culprit pays his fine rather than go to jail.

BATCHAWANA BAND.

Reserve.—All the lands set apart for the Batchawana band have been surrendered for the purpose of being sold for the benefit of its members. These reserves were situated to the north and northwest of Sault Ste. Marie; and Whitetish island, a small island in St. Mary's river, adjoining the town of Sault Ste. Marie, where a few families have resided until the end of 1905, when a small reserve was obtained for them at Gros Cap, to which place they have been removed, others of the band having formerly resided at that place. Gros Cap is situated at the outlet of Lake Superior, on the St. Mary's river, about 15 miles west of the town. Nearly one-half of the band reside on the Garden River reservation.

The Agawa branch of this band reside on the west shore of Batchawana bay. They number about 55 persons. The land on which they reside does not belong to the band, but is occupied by the Indians as squatters.

Population.—During the past year there have been 12 births and 16 deaths, while there has been an increase of 4 by marriage, making the population the same as last year, about 381.

Health and Sanitation.—The health of the band during the past year has been very good. A few cases, evidently of consumption, have been noticed. The dwellings

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are generally kept clean, although some are not in as good a state of sanitation as might be desired.

Occupations.—Most of those of the band residing on the Garden River reserve engage in cultivating the soil to a small extent. The greater part are employed in the lumber camps during the winter, and in the spring and summer as river drivers and in loading vessels; others, during the summer, are employed as canoeists, and on survey parties. Fishing is the chief occupation of those residing at Batchawana, Goulais Bay and Gros Cap.

Buildings.—Their buildings are generally of log, with a few frame houses.

Stock and Implements.—Members of this band who reside on the Garden River reserve raise cattle, horses and pigs; and the ordinary implements, such as ploughs, harrows, &c., are used. At Gros Cap, Goulais Bay and Batchawana very little stock is kept.

Education.—Those of this band residing on the Garden River reserve send their children to the schools there. The greater portion attend the Roman Catholic school, and a small number the Church of England school. Early in 1895 a new school was opened at Goulais Bay, where considerable interest is exhibited by the children in their work, all being very anxious to attend school. There are no schools at Batchawana and Gros Cap.

Temperance and Morality.—Some of the Indians of this band are addicted to the use of intoxicating liquors, when they can obtain them; others are reasonably temperate and moral. Those residing near the towns are liable to be led into temptation, and use intoxicants when they can obtain them. A strong effort is being made by the authorities to prevent them obtaining liquor.

MICHIPICOTEN BAND.

Reserve.—A reserve of about 9,000 acres belonging to this band is situated at Little Gros Cap, a short distance to the west of the mouth of the Michipicoten river. A portion of this reserve was surrendered and sold to the Algoma Central Railway Company, where it has an outlet at Michipicoten harbour for the mining district in which the great Helen mine is situated. Extensive ore docks have been built here, and shipments of iron ore, since the resumption of work by the Lake Superior Company, are very large. On this reserve about half a dozen families reside.

Another small reserve of about 200 acres, adjoining the town of Chapleau, was purchased from the Ontario government for a branch of this band in the fall of 1904; while another, on an island in Dog lake at Missinabi, of the same extent, was purchased for the Indians there. A portion of this band reside in the neighbourhood of Whitefish, on the main line of the Canadian Pacific railway.

Population.—As the census is always taken in the month of July, as far as known the population of this band remains the same as last year, namely, 353 persons.

Health and Sanitation.—The season of 1905-6 has been generally, as far as we can learn, a healthy one for this band, very few deaths having been reported. A tendency to scrofula appears rather marked among the Indians in the neighbourhood of Missinabi. In other respects they appear to be in very good health.

Occupations.—Hunting and trapping during the winter months is engaged in by the greater number of this band, the Indians usually leaving their permanent homes and going back into the hunting and trapping country for the winter season, returning in the spring with the product of their labour. In the summer they are largely employed as canoeists by the Hudson Bay Company, railway companies and surveying parties. Many of them excel in this kind of work.

Buildings.—At my last visit there were but five houses on the reserve at Little Gros Cap, Michipicoten river. On the small reserve at Chapleau six new dwellings had been erected, and on the small reserve at Missinabi about four new dwellings.

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Education.—A Roman Catholic school at Michipicoten river is attended by a small number of children of this band residing in that neighbourhood. At Chapleau the Indian children attend the public school. There are no other Indian schools connected with this band.

Temperance and Morality.—As a rule, the members of this band are temperate and reasonably moral, but largely owing to the fact that most of them are out of the reach of temptation.

I have, &c.,

WM. L. NICHOLS,

Indian Agent.

PROVINCE OF ONTARIO,
OJIBBEWAS OF LAKE SUPERIOR, WESTERN DIVISION,
PORT ARTHUR, August 1, 1906.

FRANK PEDLEY, Esq.,

Deputy Supt. General of Indian Affairs,
Ottawa.

SIR.—I have the honour to submit my annual report regarding the Indians of this agency for the year ended June 30, 1906.

FORT WILLIAM BAND.

Reserve.—This reserve is situated along the Kaministiquia and Mission rivers, and contains about 13,500 acres. The frontage, or 1,600 acres, has been sold to the Grand Trunk Pacific Railway Company for terminal purposes. Arrangements are being made to remove the band. They are about equally dividing and locating their new reserves at Squaw bay and the foot of McKay's mountain, which is still on the old reserve. Houses will be built, land cleared, roads built for them, and the majority of them will have a surplus in cash when they move to their new homes. The quality of the land is good, and after being cleared up and drained will raise good vegetables.

Tribe.—The band belongs to the Ojibbewa tribe.

Population.—The band numbers 279, consisting of 63 men, 94 women, 67 boys and 55 girls.

Health and Sanitation.—Special sanitary precautions were taken last fall and winter during the epidemic of typhoid at Fort William, with the result that the band escaped the disease. The general health of the band is good.

Occupations.—Their occupations are varied. A number of the men and women work in the town, fishing, exploring, acting as guides, berry-picking and in lumber camps. A number of them do considerable farming, especially potatoes and hay.

Buildings.—Material being easily obtained, they are able to erect a better class of houses. Two new houses were built during the year.

Stock.—Additions were made to their list during the year. The cattle and horses are personal property.

Implements.—Several own what farming implements are required. They can hire what they require in town for harvesting.

Education.—Two schools are on the reserve: the Indian boys' and girls' day school and the St. Joseph's Orphanage in charge of the Rev. Sisters of St. Joseph, who are well qualified, and take deep interest in the work.

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Religion.—Of the band about 240 are Roman Catholics and the rest pagans. There is a church, resident priest, travelling missionary, and St. Joseph's Convent in charge of the Rev. Mother Superior and sisters. All these combine to have a good effect on the conduct of the band.

Characteristics and Progress.—Those of the band who engage in cultivating their lands are doing well, and have a good example in the Brothers of the mission. The majority of them do not pay sufficient attention to their opportunities for farming.

Temperance and Morality.—There is improvement in this respect. The majority are moral and well behaved.

RED ROCK BAND.

Reserve.—This reserve is situated on the Nipigon river, near Lake Helen, and contains 486 acres.

Population.—The population of the band is 216, comprising 50 men, 59 women, 62 boys and 45 girls.

Health and Sanitation.—The general health of the band is good.

Occupations.—The chief occupations in the winter are hunting, and working in the lumber camps. In the summer season the men act as guides for sportsmen on the Nipigon river, fishing for trout; they make good wages, and are considered excellent men. The present year they also have had employment as packers and canoe-men for the surveyors on the Grand Trunk Pacific railway.

Buildings and Stock.—Their dwellings are scattered, at the Mission, Lake Helen, on the river and below Lake Helen. The buildings are not large, but are comfortable. They own three or four teams of horses and several head of cattle.

Education.—The school-house on the river was closed, but the school at the mission, under the charge of Miss Barclay, is well attended and efficiently conducted.

Characteristics and Progress.—The majority are industrious. If they could be induced to pay more attention to farming, it would be of great benefit to them, as the land on the reserve is excellent.

Temperance and Morality.—Considering the close proximity to civilization, their conduct is good, and few complaints are made.

NIPIGON BAND.

Reserve.—The reserve is on or at the mouth of Gull river, on Lake Nipigon, and contains 7,500 acres. They appear to be divided into three divisions, one at the English mission on Grand bay, one at Jackfish island and the one at Gull river.

Population.—The band numbers 452, comprising 68 men, 97 women, 152 boys and 135 girls.

Health and Sanitation.—The general health of the band is good.

Resources and Occupations.—The young men have had considerable work as canoe-men and packers for the surveyors on the Grand Trunk Pacific railway the past year. The principal occupation is hunting. The Ontario government has placed Nipigon lake and river in a forest reserve. The Indians are much disturbed in consequence; they are afraid they will not be allowed to hunt or fish.

Buildings, Stock and Implements.—They have no stock. They are growing some vegetables, chiefly potatoes; there is improvement in this respect. Two new buildings were put up this year.

Temperance and Morals.—Liquor does not reach them. Their conduct appears to be good.

Religion.—The English mission at Grand bay is converting a few. There is a Roman Catholic church at Jackfish island, which claims some 225 followers; the rest are pagans.

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PAYS PLAT BAND. *

Reserve.—The reserve is situated on Pays Plat river, Lake Superior, and contains 640 acres.

Population.—The population is 44, comprising 8 men, 13 women, 12 boys and 11 girls.

Health and Sanitation.—There is very little sickness among them. The surroundings are kept pretty clean.

Occupations.—The principal occupations are hunting and fishing; at times acting as guides, packers and canoe men. During the blueberry season they sell large quantities.

Buildings and Stock.—Their buildings are small, but comfortable. The chief has one bull and a plough.

Religion.—There is a church on the reserve. All the members of the band are Roman Catholics.

Temperance and Morals.—Their conduct in these respects is very good.

PIC BAND.

Reserve.—The reserve is situated on the Pic river, Lake Superior, and contains 800 acres divided into 25 farms facing on the river.

Population.—The population of the band is 210, comprising 48 men, 60 women, 55 boys and 47 girls.

Health and Sanitation.—There has been very little sickness among them. The chief looks after the sanitary conditions.

Occupations.—Their principal occupations are hunting and fishing, and picking berries in season. The Grand Trunk Pacific surveyors gave a number of them employment transporting supplies.

Buildings.—Their buildings are comfortable and clean.

Education.—The church formerly belonging to the Roman Catholic mission was purchased for a school. Under teacher J. A. Blais the attendance is good, and the children making fair progress.

Religion.—There is a new church on the reserve. All the members of the band profess to be Roman Catholics.

Characteristics.—They are fairly industrious, and are making progress towards improving their gardens. Fences are in good order, and there should be a good crop of potatoes.

Temperance and Morals.—There is very little to complain of in these respects.

Roads.—They are instituting a plan so that each man will put in a couple of days' work towards a road along their frontage. They also ask that a road be built from the reserve to the Canadian Pacific railway station at Heron bay.

LONG LAKE BAND.

Reserve.—This reserve is situated on the northwest end of Long lake, and contains 640 acres.

Population.—The population of the band is 320, comprising 58 men, 83 women, 79 boys and 100 girls.

Health and Sanitation.—The general health has been good.

Resources and Occupations.—Their occupation is hunting; at times the transporting of supplies for the Hudson's Bay Company. They do very little at farming. The past year the Grand Trunk Pacific survey has given them some employment.

Education.—A school is now open, under Miss Finlayson as teacher, with good attendance, and making fair progress.

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Religion.—Of the band 280 are Roman Catholics, 10 are Anglicans and the rest are pagans.

Characteristics.—They are intelligent and good hunters. They make very little attempt towards cultivating their land.

Temperance and Morals.—The morality of the band is good. Liquor is some six days removed from them, so they have few opportunities.

I have, &c.,

NEIL McDUGALL,

Indian Agent

PROVINCE OF ONTARIO,

PARRY SOUND SUPERINTENDENCY,

PARRY SOUND, August 15, 1906.

FRANK PEDLEY, Esq.,

Deputy Supt. General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit the following report and statistical statement, showing the condition and progress of the various bands in this superintendency, for the year ended June 30, 1906.

PARRY SOUND BAND.

Reserve.—This reserve is situated on the eastern shore of the Georgian bay, near the town of Parry Sound. It contains an area of 27 square miles.

Resources.—The resources of this reserve are agriculture, hunting and fishing. The lumbering operations of several large concerns at Parry Sound, together with the works in connection with the Grand Trunk railway at Depot Harbour located on the reserve, enable the members of this band to secure employment at almost any time they may desire it.

Tribe or Nation.—The Indians of this band belong to the Ojibbewa tribe.

Vital Statistics.—The population of this reserve (exclusive of those Indians residing on the reserve who do not belong to the band) is 105, consisting of 21 men, 33 women and 46 children. During the year there have been 6 deaths and 1 emigration, also 5 births and 1 immigration, making a decrease in the number of persons in the band of 1 for the year.

Health.—The health of the Indians of this band for the year has been only fairly good.

Occupations.—The members of this band have exceptional means of earning a livelihood. Besides their agricultural pursuits, which are gradually being improved, they secure considerable employment acting as guides to tourists who visit the adjacent summer resorts during the season, and in winter they can secure work in the lumbering camps within easy reach of the reserve.

Buildings and Stock.—The improvements of these are not as noticeable as I should wish for. There is, however, one very good farm on the reserve owned by James Walker, a former member of the Cape Croker band, but who now belongs to the Parry Sound band, and I am endeavouring to induce the other members of the band to emulate this Indian in their agricultural pursuits.

Education.—The educational affairs of this band are in a fairly satisfactory condition. There are two schools on the reserve, each taught by a female teacher holding a third-class certificate. There are 18 children of school age on the reserve,

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besides those children residing on the reserve who do not belong to the band, some of whom attend school, so that the attendance has been fairly good during the past year. The progress of the pupils has been as good as could be expected.

Religion.—The religious denominations of this band are divided as follows: 40 Methodists, 42 Roman Catholics and 17 pagans. The Methodists have a very good church on the reserve, and the services, which are conducted by the Rev. Richard Black, the resident missionary on the reserve, are usually well attended. The Roman Catholics receive occasional visits from one of their clergy, the services at such times being held in the Roman Catholic church at Skene village.

Characteristics.—The Indians of this band are a very well behaved and law-abiding people, and morally they stand very high.

Temperance.—The members of this band are a most temperate body, as no case of intemperance among them during the year has been reported to me; their conduct in this respect has been quite satisfactory.

SHAWANAGA BAND.

Reserve.—This reserve is situated about 4 miles inland from the eastern shore of Shawanaga bay, on the east side of the Georgian bay, and 23 miles north of the town of Parry Sound. It contains an area of 14 square miles.

Resources.—The resources of this reserve comprise farming, which, however, is not carried on to any great extent; fishing, and the gathering and selling of wild fruit, &c.

Tribe or Nation.—The Indians of this tribe belong to the Ojibbewa tribe.

Vital Statistics.—This band has a population of 111, consisting of 27 men, 32 women and 52 children. During the year there have been 3 births and 4 deaths, making a decrease in the population of the band of 1 for the year.

Health.—The health of this band for the past year has been fairly good.

Occupations.—Farming to a limited extent forms one of the occupations of this band. Fishing and hunting are, however, the means adopted by most of them in earning a living. The Buffalo Fish Company, which has a depot at Pointe au Baril, employs quite a few of the members of this band in the capacity of fishermen, at which they make good wages.

Buildings.—The buildings of this band are small, and of inferior type. Most of them are built of logs, and of such dimensions that they do not allow of the proper housing of the occupants.

Education.—The children of this band are taught in a school-house on the reserve, where the exercises are conducted by a female teacher holding a third-class certificate. The course of studies is that authorized by the department. The number of children of school age is 25. The progress of the pupils during the past year has been very fair.

Religion.—The religious denominations of this band are divided as follows: 76 Methodists and 35 Roman Catholics. There are two churches on the reserve: the one belonging to the Methodists, which is now completed, being a very creditable structure; the other, belonging to the Roman Catholics, is not near completion yet. Services have frequently been held in the Methodist church, and they have been well attended.

Characteristics.—The Indians of this band, while not as industrious collectively as they might be, appear to be a bright and intelligent body of people. A few of them do exceptionally well in their employment as fishermen for the Buffalo Fish Company at Pointe au Baril, and if more of the band would apply themselves to work, they would all be able to earn a fair living.

Temperance and Morality.—I am pleased to say that no case of intemperance in the band has been reported to me during the past year. Their moral conduct has also been of a high order.

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HENVEY INLET BAND.

Reserve.—This reserve is located on one of the arms or inlets of the Georgian bay, almost midway between Byng inlet and French river. It contains an area of 30 square miles.

Resources.—The resources of this reserve are agriculture, fishing and hunting.

Tribe or Nation.—These Indians belong to the Ojibbewa tribe.

Vital Statistics.—This band has a population of 174, consisting of 47 men, 57 women and 70 children. During the year there were 6 births and 3 deaths, making an increase in the population of this band of 3 for the year.

Health.—The health of this band for the past year has been very good.

Occupations.—The members of this band engage in farming only to a limited extent. Fishing, hunting and working in the lumber camps in the vicinity of the reserve are the means adopted by most of them in earning a living.

Education.—The number of children of school age on this reserve is 28. There is one school on the reserve, conducted by a female teacher holding a third-class certificate. The course of studies is that authorized by the department. The attendance and discipline are very good, and the pupils are making very good progress in their studies.

Buildings, &c.—The buildings belonging to the members of this band are of a very fair order, their dwelling-houses being whitewashed and kept in a very neat condition. Their village is located on a high and picturesque bluff, and I think, taking their houses collectively, they form the most creditable group of Indian dwellings in this superintendency. Their agricultural implements are not numerous, consisting of 5 ploughs and a harrow.

Religion.—Nearly three-fourths of the members of this band are Roman Catholics, the remainder being Methodists. A very good Roman Catholic church is now completed, and services are occasionally held in it by the missionary priest who resides at Byng Inlet. The Methodists have also erected a very good church, and services are frequently held in it by visiting clergy.

Characteristics.—The members of the band are of a superior character. They are a stalwart body of men, and their appearance indicates constant industry.

Temperance and Morality.—Their conduct in both these respects during the past year has been all that could be desired.

WAPPA BAND (FORMERLY GIBSON).

Reserve.—This reserve is situated between the southern end of Lake Muskoka and the Georgian bay. It contains an area of 25,582 acres.

Resources.—The resources of this reserve are agriculture and lumbering.

Tribe or Nation.—These Indians are Mohawks, or as they are more generally known, Iroquois. They were originally residents of Oka, in the province of Quebec.

Vital Statistics.—This band has a population of 140, consisting of 39 men, 32 women and 69 children. During the year there were 3 births and 2 immigrations, making an increase in the number of persons comprising the band of 5 for the year.

Health.—The health of this band for the year has been very good.

Occupations.—The members of this band depend chiefly on farming for a living. During the winter months some of the younger men find occasional employment in the lumber camps in the vicinity of the reserve, and in summer a number of them act as guides to tourists who frequent the Muskoka lakes in large numbers.

Buildings.—The buildings belonging to the members of this band are superior to those found on any other of the reserves in this superintendency.

Education.—There is one school on this reserve, conducted by a male teacher holding a third-class certificate. The number of children of school age is 32. The school is under the supervision of the Methodist Missionary Society, and very fair progress is being made in the education of the children.

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Religion.—The members of this band now all belong to the Methodist Church. A Methodist missionary, in the person of the school teacher, is stationed on the reserve, and regular services are held in the church, which are well attended by all the members of the band.

Characteristics.—This band may be considered the most industrious and progressive of any in the superintendency, which is largely due to the interest taken in farming.

Temperance and Morality.—The conduct of this band in these respects is of an exceptionally high order, and leaves nothing to be desired.

MAGANETTAWAN BAND.

Reserve.—This reserve is situated about 5 miles from the mouth of the Maganettawan river. It contains an area of 8,670 acres.

Resources.—The resources of this reserve are farming in a small way, hunting and fishing.

Tribe or Nation.—The Indians of this band belong to the Ojibbewa tribe.

Vital Statistics.—There are only 29 members of this band who reside permanently on the reserve; the remainder reside on the Manitoulin island. The population of the reserve consists of 5 men, 9 women and 15 children. During the past year no births or deaths occurred, so that the population of the band for the year remains the same as in 1905.

Health.—The health of the resident members of this band for the past year has been very good.

Occupations.—The members of this band engage in farming in a small way. Their reserve lies adjacent to the large lumber mills of Messrs. Holland & Graves Company at Byng Inlet, which enables them to secure employment at any time they may require it, so that if they want to work they can earn a very fair living.

Buildings and Stock.—As the population of the resident members of this band is small, their buildings are, of course, in proportion, and consist of 2 dwellings, 2 stables and 2 other buildings. Their live stock is fairly numerous for the population of the reserve.

Education.—There is no school on this reserve. The children who attend school do so at Byng Inlet, about 2 miles distant from the reserve, where there is a large and well conducted school.

Religion.—The members of this band are all Roman Catholics. They have no church, as the population of the reserve is too small to build and support one.

Characteristics and Temperance.—The Indians of this band are an industrious and well behaved people, and are as temperate in their habits as any of the bands in this superintendency.

I have, &c.,

W. B. MACLEAN,

Indian Superintendent.

SESSIONAL PAPER No. 27

PROVINCE OF ONTARIO,

SAUGEEN AGENCY,

CHIPPAWA HILL, June 30, 1906.

FRANK PEDLEY, Esq.,

Deputy Supt. General of Indian Affairs,

Ottawa.

SIR,—I have the honour to submit my annual report and statistical statement of the Indian affairs of this agency for the year ended June 30, 1906.

Reserve.—The Saugeen reserve is located in the township of Amabel, county of Bruce, on the eastern shore of Lake Huron. It comprises an area of 9,020 acres, which is principally of a light, swampy character, and has considerable stone upon it. About one-half of this land is still covered with timber.

Population.—The band consists of 396 persons.

Health and Sanitation.—The general health of the Indians has been good. During the year 3 adult deaths occurred, 2 of which were due to consumption. We had an epidemic of whooping-cough, which caused the death of 8 children. Sanitary precautions are fairly well observed, the Indians whitewashing their houses and keeping their premises clean.

Occupations.—The occupations of this band are principally farming and working as hired help. The Indians do not avail themselves of the benefits from farming to the extent to which they should.

Buildings.—A small number of new buildings has been erected during the past year. Many of the Indians have made repairs and additions to their present buildings at a considerable cost, which has added to their convenience and comfort.

Stock.—The stock on the reserve consists of horses, cattle, hogs and poultry. There is a noticeable improvement in the quality of the stock.

Farm Implements.—The farm implements owned by this band are of a better class than in past years.

Education.—There are three schools on this reserve, situated in the southwest, east and northern parts of the reserve respectively. The question of education has received the attention of many of the parents, but has not aroused sufficient interest to compel regularity of attendance of the children. Considering the attendance, progress has been good.

Characteristics and Progress.—With few exceptions, the Indians of this reserve are of an indolent disposition. They are generally law-abiding. Although not very progressive, they are living more comfortably than in previous years.

Temperance and Morality.—The Indians of this reserve are generally temperate and moral, although a percentage of them are intemperate and immoral.

I have, &c,

JOHN SCOFFIELD,

Indian Agent.

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PROVINCE OF ONTARIO,
SIX NATION INDIANS,
BRANTFORD, July 20, 1906.

FRANK PEDLEY, Esq.,
Deputy Supt. General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my annual report of the Six Nations of the Grand river, for the year ended June 30, 1906.

Reserve.—The reserve is located in the township of Tuscarora, and partly in the township of Onondaga, in the county of Brant, with a portion in the township of Oneida, in the county of Haldimand. It contains 43,696 acres.

Population.—The Six Nations consist of:—

Mohawks..	1,767
Oneidas..	363
Onondagas..	356
Tuscaroras..	399
Cayugas..	1,048
Senecas..	218
Delawares..	164
	4,315

The number of tribes comprising the Six Nation confederation was not always the same. Prior to 1714 it was the Five Nations, when the Tuscaroras were admitted, since which time it has been called the Six Nations. Some 150 Delawares were adopted later.

Health and Sanitation.—There were several cases of typhoid fever during the fall of 1905. Measles were quite prevalent in certain sections of the reserve. There were several cases of diphtheria (some laryngeal form). Anti-toxin was used in all cases, with good result. During last fall there was one case of small-pox, and during the month of April last four cases. The school children in the section were vaccinated and a strict quarantine placed on the houses. All places in this section were visited, but no further trace of the disease could be found. During the past spring measles and chicken-pox and influenza and pneumonia were quite prevalent.

There were 8,815 patients treated at the medical office on the reserve; 1,357 visits were made, 1,891 patients seen on calls, making 6,191 miles travelled by the physicians on the reserve during the year.

The annual circular issued by the department was carefully explained and interpreted at the general council held on March 13. Copies were distributed among the members of the board of health, which board greatly assisted in enforcing the sanitary measures contained in the department's circular. The council of the Six Nations is improving the water-supply upon the reserve by encouraging its members to sink wells by granting loans from the funds for the same. It also supplies tiles free, for draining swamp lands. The council-house, where large gatherings are held, is regularly and thoroughly cleaned after each meeting; carbolic acid is frequently used. The general health during the year has been fairly good.

Occupations.—General farming is the chief means of making a living. The crops for the past year were generally good. Many of the younger members frequently seek employment off the reserve.

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Buildings.—There is a steady improvement in the buildings on the reserve, and also the fencing. As fencing material is becoming very scarce upon the reserve, the Indians are building wire fences.

Stock.—The Indians take more interest in the raising of stock. Many are supplying milk to factories off the reserve, and are not depending as much on the raising of crops as in the past.

Farm Implements.—All implements required on a farm are used by many members of the band. Many Indians who depend entirely upon farming are well supplied with implements.

Education.—There are ten schools under the control of a board consisting of 9 members: 5 Indians chosen by the Six Nation Council, 3 whites, representing the joint interests of the New England Company, the Church of England, and the Methodist Church, and the Indian superintendent representing the Indian Department; and one school under the control of the Seventh Day Adventists on the reserve. During the past year the attendance has greatly improved. Four white and eight Indian teachers are employed, the Ohsweken being a graded school having two teachers. Conventions for the teachers of the reserve were held at the Ohsweken school in the months of May and October. There were five Indian pupils attending the Ohsweken school who wrote at the entrance examination of the high school at Caledonia and all were successful.

Characteristics and Progress.—The Indians are generally industrious. Those who are unable for want of stock to work land seek employment off the reserve. These Indians are most law-abiding, and are steadily improving. During the past year four dwelling-houses, nine large barns, mostly with stone basements, as well as many new wire fences, also seven new wells for the more convenient supply of water, were completed.

The Farmers' Institute of the south riding of Brant held an afternoon and evening public meeting on the reserve on February 8. Both meetings were largely attended. A women's institute in connection with the Farmers' Institute was formed, and holds regular meetings. Great interest has been taken by the women of the reserve. The Agricultural Society of the reserve, wholly under the management of Indians, held its three days' annual fair, which was a great success in exhibits and attendance. The annual ploughing match was held; only Indians are permitted to compete.

The public roads were kept in good condition under the direction of forty-five path-masters, who are appointed by the chiefs in council at their meeting held in January. The Indians built two large concrete arch culverts during the year.

Temperance and Morality.—The Indians are generally temperate in their habits. Several temperance societies hold meetings regularly on the reserve, and are increasing in membership.

I have, &c.,

E. D. CAMERON,

Indian Superintendent.

PROVINCE OF ONTARIO,

STURGEON FALLS AGENCY,

STURGEON FALLS, July 13, 1906.

FRANK PEDLEY, Esq.,

Deputy Supt. General of Indian Affairs,

Ottawa.

SIR,—I have the honour to submit my annual report and statistical statement concerning the Indians of this agency for the year ended June 30, 1906.

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NIPISSING BAND.

Reserve.—The reserve is situated on the north shore of Lake Nipissing, 2 miles west of the town of North Bay. It contains an area of 74,240 acres. The reserve is remarkably well situated for navigation as well as railway accommodation, as the Canadian Pacific railway crosses the reserve. These, with the Big and Little Sturgeon rivers, the Deuchane and their tributaries, all combine to make Nipissing an exceptionally picturesque and convenient reservation. This tract is the most valuable agricultural land in the vicinity.

Population.—This band has a population of 223.

Health.—The health of the members of this band for the past year has been good.

Occupations.—The principal occupations of these Indians are fishing, hunting, and acting as guides to tourists and surveying parties. A few cultivate small farms along the lake front, and during the winter months they work in the lumber camps. At present the greater portion of the men are engaged on township surveys north of the Canadian Pacific railway in Algoma. The women and children gather berries, and make moccasins and fancy bead-work for sale, which sell readily in the adjoining villages.

Buildings and Stock.—The Indians are improving their buildings, particularly houses. These are kept clean and comfortable. They have only a few small barns and stables, as they do not need them. They have very little stock; only a few horses, cows, pigs and poultry.

Farm Implements.—They have a few ploughs and harrows, and are well supplied with spades, shovels, hoes and garden implements. All the cultivation is done with these implements.

Education.—There are now two good schools on the reserve, one at Beaucage, and a new school which was erected at the Garden Indian village last fall. They are presided over by competent teachers, holding certificates. The attendance is good, and the progress of the pupils satisfactory.

Characteristics.—They are industrious and law-abiding, and are improving their surroundings.

Temperance and Morality.—With a few exceptions, temperance is now well observed. During the past year several fines were imposed on persons supplying liquor, but there are yet a few who get it whenever an opportunity offers. The morality of these Indians is good.

DOKIS BAND.

Reserve.—The reserve belonging to this band is situated at the head of French river, where it leaves Lake Nipissing. It contains an area of 30,300 acres, consisting of the two large Okindawk islands. These Indians are the owners of a valuable tract of pine timber. A portion of the band reside on the smaller island adjoining Lake Nipissing, leaving the larger part uninhabited.

Population.—The population of this band is 80.

Health.—The health of the members of this band for the year has been good. The two deaths which occurred were due to old age.

Occupations.—The occupations of these Indians are fishing and hunting, and acting as guides to tourists; while others work on the drives and in the adjacent lumber camps. Those who live on the reserve cultivate small gardens and catch fish for their own use.

Buildings and Stock.—The buildings of this band are few in number, and built of logs. The stock comprises only a few ponies and cattle.

Education.—There is no school on the reserve, although a school was offered to them, but they do not wish to have their children educated.

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Characteristics.—The members of this band are not industrious like the others in this agency, but seem to be contented in their former state. They seem rather to oppose anything pertaining to modern living. They do not take to farming, or in fact to anything else which would better their mode of living.

Temperance and Morality.—The conduct of this band in these respects is of exceptionally good order.

TEMAGAMI BAND.

Reserve.—No reserve has as yet been given to this band. The members live around the shores of Lake Temagami, while quite a number live on Bear island, near the Hudson's Bay Company's post. Lake Temagami is situated 72 miles from North Bay, and is now reached by the new railway, operated by the Ontario government. This lake is noted for its clear water and beautiful islands, and is now a prominent tourist resort.

Population.—This band has a population of 92.

Health.—The health of the members of this band for the past year has been good.

Occupations.—The principal occupations of these Indians are hunting, fishing, and acting as guides to tourists. They cannot more than half supply the tourists, which necessitates bringing in outside guides from other reserves. They do not farm, as they have no land selected as yet for them; some cultivate small gardens along the lake.

Buildings and Stock.—The buildings of this band are very limited, a large number living in tents around the shore of the lake, while others have houses on Bear island.

Education.—This band has a good school on Bear island, Lake Temagami, in charge of Miss Dougherty, a competent teacher. The children are a smart, intelligent class, and appear to be progressing with their studies.

Characteristics.—The members of this band are a bright, intelligent body, and take more readily to the modes of living of the whites. They are noted as expert canoeemen, a number being employed by the Hudson's Bay Company for this purpose.

Temperance and Morality.—A few of the Indians of this band are addicted to liquor, but are very reticent about giving information against the persons supplying them. During the past year a heavy fine was imposed on a dealer, which, I think, will have a good effect for the future. Morally, their conduct has been as good as usual.

I have, &c.,

GEO. P. COCKBURN.

Indian Agent.

PROVINCE OF ONTARIO,

THESSALON AGENCY,

THESSALON, July 21, 1906.

FRANK PEDLEY, Esq.,

Deputy Supt. General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my annual report relating to the affairs of the several bands of Indians in my agency for the year ended June 30, 1906.

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THESSALON RIVER BAND.

Reserve.—This reserve is situated on the north shore of the North channel of Lake Huron, about 6 miles east of the town of Thessalon, and contains an area of 2,307 acres.

Tribe.—These Indians belong to the Ojibbewa tribe.

Vital Statistics.—The population of this band is 133, consisting of 34 men, 42 women and 57 children. The numbers differ slightly, there being a decrease of 7 since my last report.

Health and Sanitation.—The health of this band has been satisfactory during the year.

Occupations.—These Indians are mostly employed as farm labourers, and in loading vessels in summer; and many work during the winter in the lumber camps. They do a little fishing for their own use, and the women and children make baskets and gather berries, which they sell.

Buildings.—No new buildings have been erected during the year, but the dwellings are kept clean and comfortable. They have a few barns and stables, and at present do not need any more.

Stock.—Their stock is limited. They have a few horses and cows, and some pigs and poultry.

Farm Implements.—They have a few ploughs and harrows, but the cultivation of the soil is done principally with spades, shovels, hoes and hand-rakes.

Education.—There is a school-house on the reserve, but it is closed owing to the lack of interest taken by most of the parents in education. Several of the young people are attending the neighbouring public school, and are showing marked improvement.

Religion.—These Indians are all Roman Catholics, and are regularly attended by a visiting missionary. They appear to take considerable interest in their religious instruction.

Characteristics and Progress.—These Indians are law-abiding and industrious, and are advancing in prosperity and in their mode of living.

Temperance and Morality.—These Indians are not addicted to the use of intoxicants; in fact it would be difficult for them to get intoxicating liquors, and they are, generally speaking, a moral community.

MISSISSAGI RIVER BAND.

Reserve.—This reserve is situated on the east side of the Mississagi river and on the north shore of the North channel of Lake Huron, and comprises an area of 3,000 acres.

Tribe.—The Indians of this band are of the Ojibbewa tribe.

Vital Statistics.—The population of this band is 137, consisting of 26 men, 41 women and 70 children; being a decrease of 3 since my last report.

Health and Sanitation.—The health of this band has improved since my last report. A few of them are still troubled with scrofula and kindred diseases, and several have consumption. Their habits are clean and orderly.

Occupations.—These Indians are mostly labourers, and work in the lumber camps in the winter. In the summer they work in the saw-mills near the reserve, and help loading lumber vessels, and make good money. The women and children gather berries and make baskets for sale.

Buildings.—Their dwellings are mostly logs, in a fair state of repair and comfort. Their stables and outhouses are of little value.

Stock.—They have only a few horses and cows, and some young cattle, poultry and pigs.

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Farm Implements.—They have only one plough, a couple of harrows, and a few spades, hoes and rakes, and they have a few driving-sleighs.

Education.—There is a school-house on the reserve, but it is closed and has been for nearly a year. The parents do not seem to take much interest in education.

Religion.—These Indians are all Roman Catholics, and they obtain their religious instruction from a visiting missionary.

Characteristics and Progress.—This band is, generally speaking, industrious. The members are all well clothed and dress well, and like to be considered respectable.

Temperance and Morality.—They are a temperate people, but some of them are not moral, owing, largely, to the proximity of large lumber mills.

SERPENT RIVER BAND.

Reserve.—The reserve lies east of the mouth of the Serpent river, and is bounded on the south and west by the North channel of Lake Huron, and on the north by the Serpent river, and contains 27,480 acres.

Tribe.—These Indians are of the Ojibbewa tribe.

Vital Statistics.—The population of this band is 114, there being 23 men, 28 women and 63 children.

Health and Sanitation.—The health of these Indians has been good during the year.

Occupations.—These Indians are labourers, working mostly in saw-mills on the reserve in the summer, and in the lumber camps in the winter, and earn good wages. They cultivate vegetables, and the women and children gather berries for sale.

Buildings.—About one-half of the dwellings are of the frame class; the remainder are a good class of log buildings, and are kept in good repair and clean and neat. They have a few outbuildings and have little use for them.

Stock.—They have a few mares and colts, and a few pigs and some poultry, and they are anxious to obtain more in the future.

Farm Implements.—They have a few ploughs, and sufficient shovels, spades, hoes and rakes for their requirements.

Education.—They have a good school and a good teacher, and the parents seem to take a lively interest in education.

Religion.—These Indians are Roman Catholics. They have a nice church, and take an interest in religious instruction.

Characteristics and Progress.—They are a happy, contented, law-abiding, industrious and progressive people.

Temperance and Morality.—They are temperate, and moral in their habits and conduct.

SPANISH RIVER BAND.

Reserve.—This reserve is situated on the north shore of the North channel of Lake Huron, along the south bank of the Spanish river. It is bounded on the south and west by the waters of the North channel, and on the north by the Spanish river, and contains 28,000 acres. As to residence, this band is divided into three communities: two of these are dwelling on the reserve, and are in my charge, viz., at Sagamook, a beautiful point running out into the North channel, and on the left bank of the Spanish river, in the easterly end of the reserve; the third community is on the Manitoulin island, under the jurisdiction of Indian Agent Sims.

Tribe.—These Indians are of the Ojibbewa tribe.

Vital Statistics.—The population of these two communities is 250, consisting of 55 men, 60 women and 135 children. The rest of this band are at Biscotasing, and are looked after by Indian Agent Nichols.

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Health and Sanitation.—These Indians have been in fair health during the year, and, as is usual, keep their habitations clean and tidy.

Occupations.—Some of these Indians are employed as ordinary labourers; a few follow hunting and fishing for a living. The women and children gather berries and make baskets for sale.

Buildings.—This band has very good buildings and outbuildings, all of which are kept in a good state of repair; but no new buildings have been erected during the year.

Stock.—This band has a very good assortment of stock, which comprises horses, cattle, pigs and poultry, and there has been great improvement during the past year in the number of colts they have raised, for which they have a good market.

Farm Implements.—They have a few ploughs and harrows, and a lot of hoes and rakes—all indeed that they require for the cultivation of their gardens.

Education.—They have a good school at Sagamook, a beautiful frame structure, which serves as dwelling and school; very well attended, and the best school in my district.

Religion.—Those of the band designated as No. 1, at Sagamook, are nearly all Roman Catholics; and those of the band designated No. 2, at Spanish river, are nearly all Anglicans.

Characteristics and Progress.—These Indians are industrious, peaceful and law-abiding, and have made some progress in habits and manners. They are well clothed, and make a comfortable living.

Temperance and Morals.—They are a temperate people; and they are a moral people, I am led to believe.

I have, &c.,

SAMUEL HAGAN.

Indian Agent.

PROVINCE OF ONTARIO,

WALPOLE ISLAND AGENCY,

WALPOLE ISLAND, July 9, 1906.

FRANK PEDLEY, Esq.,

Deputy Supt. General of Indian Affairs,
Ottawa.

SIR.—I have the honour to transmit my annual report on the Chippewas and Pottawattemie bands of Walpole Island reserve for the year ended June 30, 1906, together with statistical statement for the same period.

Reserve.—This reserve consists of the Walpole, St. Ann's and Squirrel islands, and borders on the St. Clair river for a distance of 8 miles, and has an area of 40,480 acres.

Population.—The population of the Chippewa band is 594, and that of the Pottawattemie band 180.

Health and Sanitation.—The health of the Indians has been better the past year than for some years owing to the majority having pure water for drinking purposes.

Occupations.—The majority of the Indians work amongst the whites in the beet-fields in summer, and in the woods in winter, and make good wages. A small number farm.

Buildings.—There has not been much building done the past year, but what buildings are being built are of a better class than usual.

Stock.—The stock on the reserve is improving in quality, especially horses.

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Farm Implements.—The Indians are fairly well supplied with agricultural implements, but do not take the care of them that they should.

Education.—There are two schools open on the reserve: one at the southern end and one on the St. Clair river. Both schools are well attended, and the pupils are making fair progress. The parents do not take the interest in education that they should.

Characteristics and Progress.—The Indians are law-abiding and industrious as a whole, but would rather work out for the whites than farm their own land. There are a few that are getting well off, but the majority are just making a good living.

Temperance and Morality.—There is quite an improvement with regard to temperance. The authorities across the border from the reserve have taken the matter in hand, and are doing all that is possible to stamp out the evil. There has been a marked improvement the past month, and, if nothing happens in a short time, it will be a rare thing to see an Indian intoxicated. There has been a slight improvement in their morals during the past year, but they are not as moral as they should be.

I have, &c.,

J. B. McDougall.

Indian Agent.

PROVINCE OF QUEBEC,

ABENAKIS OF BECANCOUR.

BECANCOUR, JUNE 30, 1906.

FRANK PEDLEY, Esq.,

Deputy Supt. General of Indian Affairs,
Ottawa.

SIR,—I have the honour to transmit my annual report and tabular statement for the year ended June 30, 1906.

Reserve.—The reserve of the Abenakis is situated northwest of the Becancour river, Nicolet county. The area of the reserve is exactly 148 63-100 acres.

Tribe.—The Indians of this band call themselves the Abenakis of Becancour.

Vital Statistics.—The population of this band is 27, including absentees,—12 men, 12 women and 3 children. During the year there was 1 death, and 1 marriage with a woman of a foreign band; there were no births.

Occupations.—The chief occupations of the Abenakis are cultivating their lands and working in the shanties in winter and stream-driving in spring. They also make baskets and axe handles. Most of them are poor. Some are unable to work, and the government assists them, in so doing performing a great act of charity.

Buildings.—The buildings are well maintained. There were none erected this year.

Stock and Farm Implements.—The Indians have a small number of horses, several milch cows, and some fowls and pigs.

The Indians purchase farm implements and endeavour to improve their land.

Health and Sanitation.—There has been no epidemic on the reserve this year. Most of the Indians are enjoying good health, and sanitary precautions have been observed.

Education.—The school-house on the reserve is closed because there are only three children of an age to attend. The municipality of Becancour gives these children the privilege of attending the public school near the reserve, but they take very little advantage of this, owing to the negligence of their parents in not compelling them to attend.

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Characteristics.—The Indians for the most part are industrious. They are men capable of doing great work. They easily obtain employment in the shanties. They are improving their condition. They are more economical than formerly, and save more money than they spend.

Religion.—All the Indians of this band are Roman Catholics. Most of them attend to their religion well. Not having a church on the reserve, they attend the parish church, and are administered to by the curé, who acts as their missionary.

General Remarks.—The Indians are quite civilized, as much so as the surrounding white people. Only very few of them are pure Indians; most are half-breeds, for the mothers of the young people are white women. Most of them do not speak their own language; they speak French and a little English.

I have, &c.,

JULES R. DUBE.

Indian Agent.

PROVINCE OF QUEBEC,

ABENAKIS OF ST. FRANCIS.

ST. FRANÇOIS DU LAC, July 5, 1906.

FRANK PEDLEY, Esq.,

Deputy Supt. General of Indian Affairs,
Ottawa.

SIR,—I have the honour to transmit my annual report and statistical statement for the year ended June 30, 1906.

Reserve.—The reserve of the Abenakis of St. François de Sales is composed of several pieces of land situated in the seigniories of St. François du Lac and Pierreville. The total area is 1,819 acres and 52 perches.

The part of the reserve occupied by the Abenakis is designated as No. 1217 on the official plan of the cadastre of the parish of St. Thomas de Pierreville, and contains 1,228 acres. The village is situated on the east bank of the St. Francis river, about 3 miles from its discharge into Lake St. Peter, and it has a very picturesque site.

Population.—The population of the band is 336.

Health.—There has not been any epidemic during the year, but there have been some cases of tuberculosis.

Occupations.—The chief occupation of the Abenakis is the making of baskets and fancy-work. They make baskets all winter, and about the month of June most of the families go to the White mountains and to the seaside resorts of the United States and Canada, where they sell their merchandise. They return in the fall. This industry is their chief source of revenue. There are also some families that hunt, though they make baskets also; but what they realize from this source is diminishing each year in proportion as game becomes more rare.

Agriculture is only a secondary occupation among the Abenakis of St. Francis. Some of them do no cultivation at all; others cultivate some vegetables. Some families cultivate a little more, but the sale of their baskets, which obliges them to be absent most of the summer, prevents them from giving the necessary attention.

Buildings.—The Abenakis build good houses, many of which are very pretty and comfortable.

Stock.—The Abenakis own some horses, quite a number of good cows and some pigs.

Farm Implements.—The Abenakis have only a few farm implements, and what they own are of little value.

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Education.—The education of the children is well cared for. All the Indians can read and write, and several of them have made a full course at a college of classics or at some other institution for higher education.

There are two good schools on the reserve: one, Protestant, under the charge of the Rev. Samuel J. Boyce, and the other, Roman Catholic, under the charge of the Grey Nuns. However, as the number of children attending the latter school is increasing all the time, it will be necessary to have a third teacher for this school. The Roman Catholic school, which is now finished, is a pretty little convent, where the pupils may take a complete commercial course, including stenography and typewriting, and receive a diploma approved by the Supt. General when they have passed the necessary examinations.

Characteristics and Progress.—As a rule the Abenakis are industrious. The sale of their baskets brings them in sufficient revenue to enable them to live comfortably, and some of them are rich.

Each family that comes back in the fall is in possession of a good sum of money, and if they were more economical they would be able to put aside something for hard times. However, several are building good and comfortable houses, and the village presents a very pretty appearance.

Temperance and Morality.—There have been only a few disturbances caused by the abuse of liquor; and the moral conduct of the Abenakis is good as a rule.

General Remarks.—The Abenakis of St. Francis are as civilized as the whites surrounding them, and live in harmony with the latter. I believe that there are no more pure-blooded Indians in the band; they all have more or less white blood in their veins. A great many of them have lost the characteristics of the red man, and it is very difficult for one seeing them for the first time to recognize them as Indians.

They all speak English and French, and use one or other of these languages in their intercourse with white men, but in the family and in their council meetings they speak Abenakis, which they preserve with religious care.

I have, &c.,

A. O. COMIRE,

Indian Agent.

PROVINCE OF QUEBEC,

ALGOUQUIS or RIVER DESERT.

MANIWAKI, July 11, 1906.

FRANK PEDLEY, Esq.,

Deputy Supt. General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my annual report and statistical statement for the year ended June 30, 1906.

Reserve.—The Maniwaki reserve is situated on the Desert river at its confluence with the Gatineau river, and contains an area of 44,537 acres and 26 perches.

Population.—This band is composed of 393 persons.

Health and Sanitation.—The health of the Indians during the past year has been fairly good. There has been no contagious disease amongst them, with the exception of a skin eruption, which has been prevalent amongst the children. There are no cases of consumption, to my knowledge, on the reserve at present. The few lingering consumptives have died during the year. The Indians in general keep in and about their premises clean. A liberal supply of lime is furnished them each year by the department for sanitary purposes. There have been no vaccinations on the reserve during

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the past year, all having been previously vaccinated, with the exception of those who had the small-pox, which was a considerable number of the older members of the band.

Occupations.—The principal occupations of the Indians are shantying, driving and hunting. Some of them lumber on their own account as jobbers for the lumber companies; others make snow-shoes and axe-handles. There are a number of them who work their farms, but none who work sufficiently to gain a livelihood. The women make moccasins, mittens, baskets and other handiwork. Maniwaki being a great market for agricultural products, one of the chief resources which the Indians do not avail themselves of is the cultivation of the soil, which they do not take advantage of. When they have a piece of land in good cultivation it is let run down for the want of proper manuring, and they are always late commencing in the spring, leaving their crops late and liable to damage by the autumn frosts.

Buildings.—There are a number of fair buildings on the reserve, but there are still a large number who reside in shanties, and do not seem to have any wish to improve their condition.

Stock.—The stock of cattle on the reserve is all of a good quality, and there are several good teams of horses on the reserve. With the exception of very few, they take good care of both horses and cattle. They raise very few pigs, these being animals hard to keep out of damage, and the larger number are confined to the few more progressive Indians. They keep some sheep, but this animal is out of place on the reserve owing to the large number of dogs kept by the Indians for hunting.

Farm Implements.—The Indians of this reserve are well supplied with farm implements for the amount of farming they do, and are especially well provided with driving vehicles for both winter and summer use.

Education.—There are three schools on the reserve, but only two in operation. No. 1 school is situated about one mile south of the village of Maniwaki, and is taught by Miss Annie O'Connor. The school is well situated on a high grassy hill, surrounded by beautiful second-growth trees of maple, elm, oak and pine, growing from a grassy bed. The children who attend school regularly are doing well, but the parents do not take sufficient interest in the education of their children.

No. 2 school is situated at the Congo bridge, about 4 miles from the village of Maniwaki, and is taught by Miss Nora McCaffrey. The pupils are doing well. This school is also built on a hill, and commands a fine view of the beautiful valley of the Congo, with its splendid land stretching from the south to west. The attendance at this school is very good, especially of the girls. There are a few boys who should attend but do not; their parents do not seem to have sufficient control over them to make them attend.

Characteristics and Progress.—The Indians in general are fairly industrious when working for foremen, but do not show the same inclination to work when they are their own masters. There are a few who are fairly industrious and doing well. They all make lots of money, but the majority of them spend it foolishly, and have no thought for the future. They are law-abiding, and none of them attempt to resist the law.

Temperance and Morality.—The majority of these Indians are addicted to drink, and in the face of all the fines that have been imposed during the past year they are still able to obtain liquor; and as drunkenness begets immorality, the morals of the older class are not of a very high standard. But I am gratified to be able to say that the younger generation are strictly moral, and are a vast improvement on their progenitors.

General Remarks.—Several members of this band are half-breeds, and would not be known from white people in dress and living. They are very much improved, and are highly civilized. They speak French, English and Indian fluently, and in manner and bearing compare favourably with their neighbours of the white race.

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The band has lost two of their most respected and progressive Indians in the persons of Joseph Beaudoin and his son, who were drowned during the early part of June while driving the Jean de Tare river.

I have, &c.,

W. J. McCAFFREY,

Indian Agent.

PROVINCE OF QUEBEC.

AMALECITES OF VIGER,

CACOUNA, July 2, 1906.

FRANK PEDLEY, Esq.,

Deputy Supt. General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my annual report, accompanied by tabular statement, in regard to the Amalecites of Viger, for the year ended June 30, 1906.

Reserve.—This reserve is situated on the St. Lawrence river, near the village of Cacouna; but most of the Indians are scattered in various counties, and it is very difficult to take a census of them; it takes much trouble and work to get the exact information.

Vital Statistics.—There are 107 Indians on the reserve. During the year there were 4 births and no deaths.

Health and Sanitation.—The health of the Indians is fairly good, except in the case of an infirm and paralyzed old man and a sick old woman. Sanitary precautions have been well observed.

Occupations.—The chief occupation of these Indians is the making of baskets, snow-shoes and fancy wares, which are sold to tourists during the summer. The men do a little fishing and hunting. Most of them are very poor. The government grants assistance to the poorest of them, especially the widows, and they are very thankful, for it is an act of charity to assist these unfortunates. Some families have cultivated the soil in the Metapedia valley, but they do not succeed very well; their poverty interferes with all progress. The young men go to the shanties in winter and earn a little money, which they spend in the spring, and their remaining parents for the most part are poor widows, who are sometimes in great distress.

Education.—The children that reside on the reserve are regularly at school, or at the convent of the village of Cacouna.

Religion.—As far as I know, all these Indians are Roman Catholics.

Temperance and Morality.—With some rare exceptions, temperance is well observed. The morality of these Indians is satisfactory.

I have, &c.,

EDOUARD BEAULIEU,

Indian Agent.

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PROVINCE OF QUEBEC,

Hurons of LORETTE,

JEUNE LORETTE, July 14, 1906.

FRANK PEDLEY, Esq.,

Deputy Supt. General of Indian Affairs,
Ottawa.

SIR.—I have the honour to transmit my annual report in regard to the Hurons of Lorette and other Indians settled in my agency, with a statistical statement, for the year ended June 30, 1906.

Reserve.—The reserve of the village of the Hurons of Lorette is the only one owned by the band now. It contains 26.75 acres, where most of the Indians reside, near the old church, which always attracts the attention of visitors.

Population.—Since my last report the population has increased by 9. It is 461 at the present time instead of 452 as it was last year. This number does not include the Indians who although not residing on the reserve reside near it: thus at St. Pierre de Charlesbourg, Quebec county, there is a family of Indians consisting of 9 persons, the head of whom is employed as game warden by the government of the province of Quebec. Nine Indians reside in Quebec county. Their chief occupation consists in the making of Indian wares.

At St. Urbain, in Charlevoix county, there is a family of Abenakis and another of Amalecites. The condition of these two families is still the same, although they have not been free from want during the past year. Abbé G. A. Girard, the curé of the place, has always been very attentive to such as they. Thus during the course of the year at his request and on my recommendation the department came to the assistance of these people.

The combined population of these four groups of Indians comprising the Huron population of the Lorette reserve is 516.

Resources and Occupations.—During the first part of the year the special industry of the Hurons, that is to say, the making of moccasins and snow-shoes, was fairly active. However, from January, 1906, until June 30, last, the demand has been much less; consequently this industry has been dull.

The Indians engaged only a little in fishing during the past year; but on the other hand the hunt was abundant and very remunerative. Fur is in great demand, and is selling at prices never before asked.

Health and Sanitation.—The cleanliness of the village and of the Indians who occupy it is such that the sanitary condition is all that one could desire.

Education.—Teaching is given by the Sisters to the children of the village. All are perfectly satisfied. No complaint has been made to me; on the contrary, all praise the education given to the children.

Religion.—With the exception of 6 Hurons of Lorette, 1 of whom is an Anglican while the others are Presbyterians, the Indians of my agency all profess the Roman Catholic religion.

Temperance and Morality.—Nothing but praise can be given to the Indians of my reserve in the matter of temperance and morality. Since the brewers who were selling beer to the Indians were punished, no excess has been observed. It is, therefore, a pleasure for me to see that my efforts to suppress intemperance and the disturbances that follow it have been successful.

I have, &c.,

A. O. BASTIEN,

Indian Agent.

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PROVINCE OF QUEBEC,
IROQUOIS OF CAUGHNAWAGA,
MONTREAL, September 1, 1906.

FRANK PEDLEY, Esq.,
Deputy Supt. General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my annual report for the year ended June 30, 1906, with industrial and agricultural statistics.

Health.—The health of the Indians has been good. There was no epidemic during the year. Consumption is the worst disease.

Occupations.—A few engage in agriculture, a few in the manufacture of lacrosse sticks, and in running rafts on the Ottawa river; others, and they are a very large number, work for the Dominion Bridge Company, the Wire Works, and the Cooper Machine Works, at Lachine and in Montreal; while others are employed in the building of bridges in various parts of Canada.

Education.—There are two Roman Catholic schools,—one for boys and the other for girls. There is also a Methodist school for both boys and girls.

Temperance.—There has been a change for the better in this respect. Still we see disorderly occurrences among the young people, caused by drink.

I have, &c.,

J. BLAIN.
Indian Agent.

PROVINCE OF QUEBEC,
IROQUOIS OF ST. REGIS,
ST. REGIS, July 2, 1906

FRANK PEDLEY, Esq.,
Deputy Supt. General of Indian Affairs,
Ottawa.

SIR,—I have the honour to transmit my report and statistical statement for the year ended June 30, 1906.

Reserve.—This reserve is situated on the banks of the St. Lawrence river, in the province of Quebec, including islands a little below Prescott, Ontario, thence down stream opposite the village of Lancaster, Ontario. On the opposite shore is the village of St. Anicet, in the province of Quebec. It contains an area of about 6,887 acres.

Population.—The population of this band is 1,431.

Health and Sanitation.—There was no epidemic on the reserve during the year, and the sanitary condition of the Indian houses has been good, with the exception of measles and whooping-cough, which resulted in a few fatal cases.

Occupations.—The principal occupations of these Indians are farming, hunting, fishing, trapping, acting as guides for tourists, running rafts of timber, doing monthly and daily labour with farmers and on railways; also manufacturing lacrosse sticks and baskets to a large extent. The women make the baskets after the wood is prepared by the men.

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Education.—There are two schools in operation on the reserve, one on Cornwall island and the other at St. Regis village. Owing to the negligence of the parents in not sending their children to school, the attendance is not large. The schools are well supplied with school material, and have good teachers.

Characteristics and Progress.—The Indians are making fair progress in cultivating their lands and improving their buildings. They are well supplied with farm implements, almost as well as white men.

Temperance and Morality.—There has been but little improvement in respect to temperance, particularly among the young men and the boys. The morality of the Indians is fairly good. *

I have, &c.,

GEO. LONG,

Indian Agent.

PROVINCE OF QUEBEC,

LAKE OF TWO MOUNTAINS AGENCY,

OKA, July 3, 1906.

FRANK PEDLEY, Esq.,

Deputy Supt. General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my report, with statistical statement, for the year ended June 30, 1906.

Reserve.—The land occupied by these Indians is situated on the Lake of Two Mountains, on the Ottawa river, province of Quebec, but the title is not vested in the Crown.

Vital Statistics.—The population is 461, consisting of 139 men, 118 women, 107 boys and 97 girls. During the year there were 12 births and 13 deaths, and 19 moved away, making a decrease of 21 in the population.

Health and Sanitation.—The health of the Indians has been, as a rule, fairly good. There has not been any serious epidemic. The Indians of this band do not comply with the rules of health. The outside of their dwellings is generally clean.

Education.—There are two schools on the reserve. Miss E. M. Young and Miss E. C. Sever are the teachers. They are very competent, and perform their duties well. The schools are provided with all necessary equipment. The number of pupils is small; this must be attributed to the indifference of the parents in the matter of education.

Religion.—The Methodists hold their services in their church. The Roman Catholics worship in the parish church.

Characteristics.—Some of these Indians are making remarkable progress in agriculture and in the dairying industry. I might mention among the Algonquins, Bazil Murray, Chas. Murray, Jacques Murray, Hyacinthe Vincent; and among the Iroquois, Simon Simon, Joseph Simon, Peter Simon and Joseph Tiochat. All these Indians have adopted the ways of white men.

Resources and Occupations.—These Indians cultivate the soil, make staves, baskets and bead-work. Several of them make moccasins and mittens; others work in the saw-mills and lumber camps.

Buildings and Farm Implements.—The buildings of some of the Indians are fairly comfortable, but many of them are falling into ruins for want of lumber, and the Indians are too poor to purchase it. Several of them have no farm implements.

Temperance and Morality.—There has been no progress in the matter of temper-

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ance. The young people drink a great deal, and for some time there has been much to be desired in the matter of morality, especially in certain families.

General Remarks.—The condition of this band is satisfactory in some cases. Several are inclined to liquor and idleness. As a rule the women are more hard-working than the men.

I have, &c.,

JOSEPH PERILLARD,

Indian Agent.

PROVINCE OF QUEBEC,

MICMACS OF MARIA.

GRAND CASCAPEDIA, July 1, 1906.

FRANK PEDLEY, Esq.,

Deputy Supt. General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my annual report for the year ended June 30, 1906, together with agricultural and industrial statistics for the same period.

Reserve.—The reserve is situated on the shores of a magnificent river, the Grand Cascapedia, and of Chaleur bay. This reserve has a beautiful aspect. It contains 416 acres, 136 of which is cultivatable and has a fairly fertile soil.

Population.—The population is 104.

Health and Sanitation.—There was no contagious disease this year, and the Indians enjoyed fairly good health.

Occupations.—The Micmacs of Maria have many means of making a living. They do a little farming, hunting and fishing. Sportsmen employ them as guides and canoemen on the Grand Cascapedia river. Some of them work in the shanties, and at stream-driving in the spring. Others are employed by farmers, or work at home making snow-shoes, snow-shovels and baskets. They also tan green skins, with which they make a great number of shoe-packs for winter wear. These articles afford them their chief revenue.

Buildings.—If we except four or five good houses, their buildings are of small value.

Education.—There is a good school on the reserve, and the children who attend regularly receive a good education. They learn English, French and Micmac.

Characteristics.—The Micmacs are generally skilful and industrious; but although they earn much they are always poor, owing to their lack of economy and their improvidence.

Temperance and Morality.—The Micmacs of Maria are generally intemperate; but I must say that there are some who never taste any intoxicating liquor. The lock-up built in the centre of the reserve is a powerful check on indulgence in drunkenness. Their morality is good, and they observe the laws of morality.

I have, &c.,

J. D. MORIN, Priest,

Indian Agent.

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PROVINCE OF QUEBEC,
MICHAMAS OF RESTIGOUCHE,
POINTE LA GARDE, August 24, 1906.

FRANK PEDLEY, Esq.,
Deputy Supt. General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my annual report for the year ended June 30, 1906.

Reserve.—The reserve is on the north shore of the beautiful Restigouche river, in the county of Bonaventure, facing the town of Campbellton, N.B.

Tribe.—These Indians are all of the Micmac tribe.

Population.—The population of the band is 490; an increase of 1. There were 24 births and 23 deaths during last year.

Health and Sanitation.—There was no contagious disease during the year. The Indians enjoyed fairly good health.

Occupations.—These Indians have many means of making a living. Some of them make a good deal out of farming; some others lumbering, stream-driving, ship-loading, and acting as guides. A few make baskets, snow-shoes, &c.

Buildings.—Their buildings are fairly good. There are many good houses well furnished, and some good barns on the reserve.

Stock.—The Indians have a good many fine horses, cows and other animals.

Farm Implements.—They have some good farm implements, though not very many.

Education.—The Indians have a very good school kept by the Reverend Sisters of the Holy Rosary. Those who attend regularly make very good progress.

Religion.—All these Indians are Roman Catholics. Their missionaries, the Reverend Father Capuchins, take a great interest in their religious welfare.

Characteristics and Progress.—These Indians are as a rule industrious and hard-workers; though some of them do not provide for the future.

Temperance and Morality.—Unfortunately a good many of these Indians are too fond of intoxicating liquor. Their morality is not as good as it should be; at least with some of them.

I have, &c.,

J. PITRE.

Indian Agent.

PROVINCE OF QUEBEC,
MONTAGNAIS OF LAKE ST. JOHN,
POINTE BLEUE, July 15, 1906.

FRANK PEDLEY, Esq.,
Deputy Supt. General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my annual report, with statistical statement, for the year ended June 30, 1906.

Reserve.—This reserve is situated on the northwest shore of Lake St. John, in the county of Chicoutimi, province of Quebec, and about 5 miles from the town of Rober-

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val. This reserve, which comprises the township of Ouatichouan, has an area of 22,423 acres, 19,523 of which has been granted to white men, which leaves the Indians an area of 2,900 acres.

Population.—The population of these Indians is 551.

Health and Sanitation.—The Montagnais of this reserve have as a rule enjoyed good health during the past year. No case of disease of undoubted contagious character was reported. All the population with the exception of very young children were vaccinated. Sanitary regulations are fairly well observed. The medical service of the reserve is attended to by Dr. J. Constantin, of Roberval, who by his devotion gives satisfaction to all the Indians requiring his services.

Occupations.—Most of the Montagnais of Lake St. John live by the hunt, which was excellent in every respect this year. The price of furs generally has been very good. Another part of the band makes its living as guides to sportsmen in the various hunting and fishing grounds of the district. There are about 30 families that engage almost exclusively in agriculture.

Buildings.—Most of the buildings are fairly clean, and well maintained.

Stock.—The stock is in good condition, although there is no great improvement either in quality or breed.

Farm Implements.—The farmers of the band are well provided with excellent farm machinery, which they know well how to use.

Education.—The school-house is situated in the midst of the reserve. It is large, well ventilated and well lighted. The parents seem rather lukewarm in regard to the education of their children.

Characteristics and Progress.—The Indians as a rule are more hard-working than formerly, and many of them earn from \$50 to \$70 a month acting as guides. The lazy ones now form a very small number, and all make an effort to earn their living honourably.

Temperance and Morality.—The Indians of this reserve are very fond of liquor, and what is more unfortunate is that they always succeed in obtaining it rather easily.

I have, &c.,

ALPHONSE MARCOUX,

Indian Agent.

PROVINCE OF QUEBEC,

MONTAGNAIS OF LOWER ST. LAWRENCE—BERSIMIS AGENCY.

BERSIMIS, July 9, 1906.

FRANK PEDLEY, Esq.,

Deputy Supt. General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my annual report for the fiscal year ended June 30, 1906, for my agency, comprising the bands residing at Escoumains, Bersimis and Seven Islands.

ESCOUMAINS BAND.

Reserve.—This reserve is situated on the southern side of Escoumains river, on the north shore of the St. Lawrence river, in the county of Saguenay, and comprises an area of 97 acres. The soil is sandy and not very good for cultivation, except for potatoes, of which the Indians generally have a fairly good crop—enough for themselves and sometimes a few bushels to sell.

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Population.—The population this year is the same as last year, namely, 43.

Health and Sanitation.—The health of the Indians has been good throughout the year; their houses and premises are kept clean. Their close proximity to the village of Escoumains and their almost daily contact with the whites, whom they try to imitate in certain respects, has rendered this small band the cleanest and most well-behaved Indians of my agency.

Occupations.—The occupations of these Indians are various, such as fur-hunting in winter; they also kill a few seals every winter, but seals are getting scarcer every year, and the time is not far away when the seals will have disappeared entirely from the place. In summer-time they act as guides to sportsmen and explorers. Sportsmen often take some of them as guides to go down on the north shore as far as Seven Islands, and sometimes farther, paying and using them well—always getting good satisfaction in their services. They also do some fishing. The lumber camps were closed all winter, so the Indians did not earn much in this industry, but a few families wintered in the camps of Escoumains. They live fairly well, but depend mostly on hunting for a living.

Education.—There is no school on the reserve, but the children of school age attended the school with the whites in the village of Escoumains. The Indians are very well satisfied with the school. All the members of this band can speak French, and all can read and write in their own language.

Progress.—The conditions of life of this band have been nearly the same ever since I have known them. The increase of their hunt is a little better this year.

Temperance and Morality.—All the Indians of this band are very temperate. None are addicted to strong drink, although it would be easy for them to procure intoxicants if they wished. All are very moral.

BERSIMIS BAND.

Reserve.—This reserve is situated on the east side of Bersimis river, on the north shore of the St. Lawrence, in the county of Saguenay, and comprises an area of 63,100 acres. There is a good quantity of spruce, good for saw-logs, also some few pines, which could be made into saw-logs, a large quantity of spruce for pulp; also a great quantity of cord-wood. There is also good farming land, but the Indians do not care about farming.

Population.—The population of this band this year is 499.

Health and Sanitation.—The health of this band has been good throughout the year. Many are consumptives. There is no change in their way of living, and it is not entirely what it ought to be in regard to cleanliness and sanitation, and it is almost impossible to convince them of this; if they do understand, they do not care to change their way of living. Some of their houses are crowded with three or four times the number of individuals they ought to contain, so much so that it is impossible to keep houses and individuals clean.

Occupations.—The only occupations of these Indians are fur-hunting in winter, and in summer making their own canoes, and salmon fishing from the middle of June until late in the fall. Messrs. Revillon Bros. are still buying salmon, but now the market is filled and Indians have to salt their salmon, which is well known to be extra choice.

A few Indians were employed as guides for explorers and prospectors, and I think a pulp-mill will be seen about here before long. There are a few families from the inland hunting grounds that did not come back yet. Almost every Indian family that went inland and stayed there all winter came back with the results of a very good hunt, and the highest prices were paid for their furs.

Education.—There is a good school on the reserve conducted by two nuns. The children attending school regularly are making fair progress.

Progress.—Year after year this band does not make any progress.

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Temperance and Morality.—A great number of this band are addicted to strong drink. Although great care is taken to prevent whisky traders from plying their trade here, the Indians are always trying to get it in some way; but the visit of Constable Giroux, who seized a few gallons of whisky from whisky traders, has put a complete check on drinking. I hope it will last all summer.

SEVEN ISLANDS BAND.

Population.—The population of this band is 377.

Health and Sanitation.—The health of this band has been fairly good throughout the year, but, like the Indians of Bersimis, consumption is prevalent among the members of the band. They have good buildings.

Education.—These Indians have no school for themselves. Some of them can speak both French and English.

Temperance and Morality.—A great many of this band are addicted to intoxicants, and avail themselves of the same means as the Indians of Bersimis of obtaining whisky. Many traders frequent the place.

I have, &c.,

ADOLPHE GAGNON,

Indian Agent.

PROVINCE OF QUEBEC,

MONTAGNAIS OF THE LOWER ST. LAWRENCE—MINGAN AGENCY,

MINGAN, September 1, 1906.

FRANK PEDLEY, Esq.,

Deputy Supt. General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my annual report for the year ended June 30, 1906.

MINGAN BAND.

Reserves.—In this agency, which includes Mingan, Romaine, Natashquan and St. Augustine, and extends east of here to the straits of Belle Isle, there has never been any special reservation of land made for Indians, and they generally camp at or near the trading posts, when they arrive from the interior in the spring.

Population.—Here, this band consists of 43 families, forming a total of 241 individuals.

Health and Sanitation.—There have been no contagious diseases among these Indians this year. Excepting the usual amount of bronchial and pulmonary troubles, they have enjoyed fairly good health.

While on the coast, during the summer months, they give much attention to cleanliness, and are steadily improving in this respect, which is quite noticeable, especially in those who have houses. This is no doubt accountable for the improved and healthy condition of the band during the last few years, when no epidemic has appeared among them.

Occupations.—All the members of this band are fur-hunters, hunting being their only means of making a living. They have done very well this year, and owing to abundance of caribou in the interior during last winter, had plenty of provisions during the hunting season, and in consequence of the large catch of fur, paid up practically all the advances made them by merchants who advanced them for hunting last year.

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Prices for furs again show a large advance on last year, and the close season for beaver, imposed by the Quebec government, being out in November last, was the cause of a large increase in the returns in fur by this band.

Owing to the large hunt made this season, and their debts being met promptly, the members of this band have been very comfortably off during the summer, and when they left for the interior last month were well supplied with all the necessities to enable them to resume their hunting for the coming winter, and except a few old women (widows) who remain out on the coast during the winter, who are too old to go inland with others, they will not require any assistance.

Buildings.—There are 21 comfortable houses here owned by the band. This represents 7 more than last year. These were built three years ago for them, but were not yet paid for, though in the interval being under lease; now, however, owing to the successful hunt, they have in most cases been paid for. Many of these houses are well furnished, and look quite nice, and, with the outbuildings, are kept in good repair, clean outside and in, and well painted. Except here, and three houses at Natashquan, and one at St. Augustine, there are no other houses owned by the Indians in this agency.

Stock and Farming.—No stock of any kind is kept by these Indians, nor do they attempt any kind of farming. Owing to their leaving in July and August each year for their hunting grounds in the interior, it would be impossible for them to cultivate anything. If the soil were suitable, owing to early frosts even a crop of potatoes would be doubtful.

Education.—There are no schools in this agency, the only means of instruction for the children being when the missionary is here on his annual visit, which lasts about two weeks. However, even with short time the results are good, as most of the adults can read and write. As the greater part of the band are away in the interior for ten months of the year, there would be no advantage to be gained by having schools.

Character and Progress.—There is not much change in this respect. Their occupation being wholly hunting, they have not much prospect of improvement in any way.

There has been more drinking here during this season than for several years, and it is very difficult to obtain sufficient evidence to convict the persons who are guilty of supplying liquor, as it is brought from Quebec by steamers and other vessels plying from the coast from there, and being consigned indirectly through white settlers to Indians. However, as usual, the reports regarding drinking by members of this band have again been very much exaggerated. The Indians have now been warned that in future those who drink or have liquor in their possession will be liable to have it seized, and be subject to fine and imprisonment, unless they inform on the persons who supplied them with the liquor.

It is impossible to prevent some of them from getting liquor when out on the coast, as many of them go to Quebec to purchase a portion of their supplies, and they then arrange for a supply being shipped to them indirectly. Were it possible to enforce inspection of the goods and parcels with which they return here from these trips, and other consignments to them during the summer by merchants with whom they have dealings in Quebec, it would be the means of stopping most of the liquor they procure from this source.

There are only a few in the band who are addicted to drink, and if there is no improvement in their conduct next season, it would be advisable, as a warning to others, to arrest several early in the season and give them a few months' imprisonment, after which they would have ample time on returning here to outfit for the winter hunting and return inland. This, I have no doubt, would have the desired effect, and prevent any further trouble in this respect; otherwise they are very moral, and fairly honest in meeting their obligations when successful in hunting.

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NATASHQUAN BAND.

Population.—The Indians of this band consist of 12 families, numbering 74 individuals.

Health and Sanitation.—There has been no contagious disease among them this year, and very few deaths. Owing to these Indians having only three houses, of which they make but little use, preferring the old-fashioned Indian tent for summer and winter use, which can be more easily kept in good sanitary condition, they are always in better physical condition, and are less subject to ordinary complaints than those at Mingan. This is no doubt owing to the general use made of tents, and to their not being in contact with whites, as other bands on the coast.

Occupations.—The members of this band are all fur-hunters, there being no other source by which they could earn a living. They have done well this year, as owing to the increase in value of skins they are all in good circumstances and require no assistance.

Buildings.—They have three small houses, which they make use of as stores, but seldom use them as dwellings, except for a few days in winter, when they happen to come to the coast.

Stock.—They have none of any kind.

Education.—The only means of education or instruction is during the annual visit of the missionary, for about two weeks during the summer.

Characteristics and Progress.—These Indians are all good hunters, and generally well able to supply all their requirements from the proceeds of their hunts during the winter; but owing to their mode of life they are not making much improvement.

Temperance and Morality.—The members of this band are not addicted to liquor, though no doubt they make use of some when they can get it, but for the last few years they have been very quiet in this respect, and no cases of intoxication have been seen or reported among them. Otherwise their morals are good, they being honest, and always meeting their liabilities when possible. This, however, depends very much on the success of the hunt from year to year, it being their only source of gain.

SEVEN ISLAND BAND.

The site for a reserve for this band was arranged for last year, subject to approval of the department, a full report of which was sent in last year. This section includes the whole of lot No. 5, the property of the Mission of the O.M.I., and extends back taking in lot No. 492, range No. 2. This is Crown land owned by the province of Quebec. The two properties combined make a large tract, which is in every way suited for a reserve, and the Indians are quite satisfied with it.

I would beg to recommend that this be arranged for, and that the proposed section be surveyed and the boundary marked, and thus prevent any trespass on the property.

There will be about fourteen Indian houses to remove which are situated a short distance north of this section; the others are built on the site.

Population.—This band consists of 79 families, a total of 377 individuals, this being 5 families less than last season. These have migrated to other posts, not having returned to the coast this summer.

Health and Sanitation.—Here there were no contagious diseases during the summer, though at one time it was feared that an epidemic of diphtheria had broken out, as nearly the whole band, shortly after they arrived from inland, were afflicted with severe sore throats, as the disease had been prevalent at this settlement last winter among the white population; but this proved a false alarm, as later it proved to be bronchial sore throat of a serious kind, and many of the children and adults were very ill with the complaint. It lasted about a month, when, owing to the efficient services of Dr. Ross, of the Hudson's Bay Company, it was stamped out, and all

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the houses thoroughly disinfected. Several children died, and two adults. These two, however, were in poor health for some time previous to the attack, but no doubt the malady may have hastened their death.

All this band give much attention to cleanliness, and are improving in this respect from year to year.

Occupations.—The members of this band are fur-hunters, this being the only means of earning. They have been very successful this year, having killed a great number of caribou and other game during the winter. Having abundance of provisions enabled them to devote more time to trapping. They made a record hunt, and the value of all kinds of fur having increased, was of great benefit to them, thus enabling them to pay up all advances given them by merchants and traders with whom they deal, the surplus being quite sufficient to purchase all supplies, &c., which they required during the summer while out on the coast.

They left for the interior in August, all well supplied for their hunting grounds, and except the few old persons who are unable, owing to age, to go inland, they will not require any assistance this year.

No farming of any kind is carried on by this band. Their mode of life would not permit of a successful attempt being made to cultivate the land were it suitable.

Buildings.—This band has 43 comfortable frame houses, and these are kept in good sanitary condition while they are occupied in summer. They are well built, painted, decorated, and many of them well furnished.

Education.—Their only means of education or instruction is during their missionary's annual visit in summer, which lasts about two weeks. However, even this short time shows good results, as most of them can read and write. As all the band are in the interior for ten months during the year, schools, if established, would not be of much advantage to them.

Characteristics and Progress.—There is not much change to note from year to year, except that they now give much greater attention for the last few seasons to the sanitary conditions of their houses and camping grounds. This no doubt accounts for the improvement shown lately in the health of the band.

Temperance and Morality.—I regret to report that a number in this band are addicted to drink, though for the last two years this was practically stopped, owing to arrests and fines imposed on Indians and whites two years ago. This year drinking has increased to some extent, as no evidence could be had sufficient to convict the persons who supplied them with liquor, the greater part of which was shipped indirectly to them from Quebec by persons with whom they do business. I did not consider it advisable to arrest the Indians in fault, and condemn them to a fine which they were quite able to pay, and would under these circumstances have committed the offence again, or to send them up for a term in jail. I warned them all at a meeting when the election for chief took place that if they did not improve and give up drinking, next year they would not only be fined for this offence, but would be sent for a term of several months to prison. Though I have been there several times since during the summer, there has been no further disturbance caused by liquor. Otherwise they are moral and fairly honest, and meet all their obligations when the hunt is successful.

Election of Chief and Councillors.—On July 28 an election was held for a chief and two councillors. Two candidates were proposed for chief, Alexander McKenzie and Francois Gregoire, the former being elected by a majority of 18 votes. Two of the four proposed as councillors were elected also. They are all well satisfied with the results, these men being the best suited for the positions, and the most capable men in the band.

I have, &c.,

W. D. B. SCOTT,

Indian Agent.

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PROVINCE OF QUEBEC,
TIMISKAMING AGENCY,
NORTH TIMISKAMING, July 9, 1906.

FRANK PEDLEY, Esq.,
Deputy Supt. General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my annual report of the Timiskaming band for the year ended June 30, 1906.

Reserve.—The Timiskaming reserve is situated on the north bank of the Ottawa river, commonly called the Quinze river, at the head of Timiskaming lake, county of Pontiac. It formerly comprised an area of 38,400 acres, but 23,124 acres have been surrendered, leaving 15,276 for the use of the band. Of the above quantity the Indians have located 3,924 acres.

Population.—The population of the band is 229, the majority being Scotch half-breeds, the minority being of the Algonquin tribe.

Buildings.—There has been one house and one storehouse erected during the year, but there has been considerable sickness amongst members of the band, several of them being afflicted by tuberculosis and scrofula. Sanitary measures are fairly well observed.

Occupations.—The principal industries engaged in by the greater number of the band are agriculture and acting as guides to tourists and sportsmen in summer. A few engage in trapping, but as a means of gaining a livelihood therefrom in this section this is fast becoming a business of the past. There is employment to be had by all that desire it in the lumber camps during the winter and spring, and several of the band avail themselves of the opportunity. A few others make canoes, paddles, snow-shoes, toboggans, moccasins and mitts for sale.

Buildings.—There has been one house and one storehouse erected during the year, and preparations are being made to erect some more houses.

Stock.—There has been a slight increase in the number of milch cows during the year, but no one individual has invested a great deal in stock.

Farm Implements.—The band is fairly well equipped with agricultural implements; quite sufficient, I believe, for their present needs.

Education.—There is one school on the reserve. Sister Mary Aimée, of the Good Shepherd Society, has been in charge for the past two years. The greater number of the children do not attend school very regularly, and some of the parents appear to be quite indifferent whether their children attend or not. They do not seem to realize the benefit an education might be to their offspring.

Progress.—There is a slow but steady progress taking place amongst the majority of the band.

Temperance and Morality.—The majority of this band are temperate in their habits. There are a few that succeed in getting intoxicants occasionally, but one can very seldom recognize or identify the person from whom they got the liquor. There have not been many cases of immorality brought to my notice during the year.

I have, &c.,

ADAM BURWASH.

Indian Agent.

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NEW BRUNSWICK,

NORTHEASTERN DIVISION,

RICHIBUCTO, July 10, 1906.

FRANK PEDLEY, Esq.,

Deputy Supt. General of Indian Affairs,
Ottawa.

SIR.—I beg to submit my annual report and statistical statement for the year ended June 30, 1906.

Location of Agency.—This agency is in northern New Brunswick, and embraces all the Indian reserves in the counties of Restigouche, Gloucester, Northumberland, Kent and Westmorland. These Indians all belong to the Micmac tribe.

EEL RIVER BAND.

Reserve.—This reserve is situated in Restigouche county, about 4 miles from the town of Dalhousie and about the same distance from the Intercolonial railway. It contains 220 acres, of which but a small portion is cleared, the remainder being woodland and bog-land.

Population.—The population of this band is 72, the same as last year.

Occupations.—These Indians work in the lumber woods, at stream-driving and in the saw-mills, where they get good wages. They pay no attention to farming beyond planting a few potatoes. They do some fishing and engage in making and selling Indian wares.

Stock and Farm Implements.—They have no stock or farm implements.

Education.—They pay no attention to education.

Characteristics.—Some of these Indians are sober and industrious, but the band as a whole is making very little progress.

BATHURST BAND.

Reserve.—These Indians have two reserves, one, the Pabineau reserve, 7 miles from the town of Bathurst, in Gloucester county, and the other, St. Peter's island, about $\frac{1}{2}$ a mile from Bathurst. The Pabineau reserve contains about 1,000 acres, chiefly woodland, and St. Peter's island 16 acres, nearly all of which is cleared. The island is separated from the mainland by a passage about a mile wide. All the Bathurst Indians were formerly settled at Pabineau, but now only two families remain there, the rest having removed to the island.

Population.—The population of this band is 32, a decrease of 1.

Occupations.—These Indians engage in manufacturing Indian wares and in begging. Some of them work in summer in the saw-mills near.

Stock and Farm Implements.—They have no stock or farm implements.

Education.—They do not send their children to school, though they have an excellent opportunity of doing so.

Progress.—They are making no progress.

BURNT CHURCH BAND.

Reserve.—This reserve is situated on the north side of Miramichi bay, about 30 miles from the town of Chatham, in the county of Northumberland. At this point the land is high and dry, and the reserve pleasantly located. It contains 2,058 acres, of which the Indians occupy about 250 acres; the remainder is covered with wood. There is some timber.

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Population.—The population is 211, an increase of 5.

Occupations.—These Indians engage chiefly in fishing, and the manufacture and sale of Indian wares. Most of them also farm in a small way.

Stock and Farm Implements.—A number of these Indians have provided themselves with stock and farm implements.

Education.—A school has been maintained on this reserve for some years, and many of the younger Indians can read and write. The present teacher is Miss Mary Keating.

Characteristics and Progress.—Many of these Indians are industrious and are making progress; more so during the past year than for some time previously.

EEL GROUND BAND.

Reserve.—This reserve is situated on the north bank of the northwest branch of the Miramichi river, in the county of Northumberland, about 6 miles above the town of Newcastle. It contains 2,682 acres, about 225 of which are cleared, the remainder being woodland and timber-land. The soil is fertile.

Population.—The population is 144, a decrease of 9.

Occupations.—These Indians work in the lumber woods, at stream-driving and at the saw-mills. Labour of this kind is always in demand in this locality, and good wages are paid. They also do some farming and fishing, and make and sell Indian wares.

Stock and Farm Implements.—Several of these Indians have stock and some farm implements.

Education.—Many of the younger members of this band can read and write. Miss Walsh, who has taught the school on this reserve for several years, resigned at the end of last quarter. Her place has not yet been filled.

Characteristics and Progress.—Many of these Indians are sober and industrious; others are not so. The band as a whole is progressing.

RED BANK BAND.

Reserve.—This reserve is situated on both sides of the Little Southwest Miramichi river, about 15 miles above Newcastle, in the county of Northumberland. It contains about 5,000 acres, well wooded with timber and fire-wood. The soil is generally fertile. The Indians occupy about 50 acres.

Population.—The population is 53, the same number as last year.

Occupations.—These Indians engage in farming, lumbering and fishing. They also act as guides to fishing and hunting parties.

Stock and Farm Implements.—Most of these Indians have provided themselves with stock and farm implements.

Education.—They give no attention to education.

Progress.—These Indians are amongst the most progressive in this agency.

BIG COVE BAND.

Reserve.—The reserve is situated on the north bank of the Richibucto river, in Kent county, and contains about 2,000 acres, a part of which is fertile land. The Indians occupy about 300 acres; the remainder is woodland and a tract of bog-land.

Population.—The population is 295, an increase of 5.

Occupations.—These Indians farm, fish and make Indian wares. They also work in the lumber woods in winter and at the saw-mills, shipping wharfs, and stream-driving in summer and spring. Their services are always in demand, and they receive good wages. Last winter several families left the reserve and settled on the Inter-

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colonial railway near Rogersville, in order to be at a more convenient locality to make and sell their wares. They have since returned to the reserve.

Stock and Farm Implements.—Several of these Indians have cattle, horses and farm implements.

Education.—There is a school on this reserve, and most of the children of school age attend. The teacher is Miss Mary Isaac, a young lady of the Micmac tribe from Restigouche, Quebec. She is doing good work, and the pupils are progressing as rapidly as can be expected.

Some of these Indians are industrious and progressive; others indolent, careless and improvident.

INDIAN ISLAND BAND.

Reserve.—This reserve is situated at the mouth of Richibucto river, in Kent county, and contains 100 acres of dry, sandy land. About 25 acres is under cultivation, the remaining part being covered with spruce and fir.

Population.—The population is 35, an increase of 1.

Occupations.—These Indians chiefly engage in fishing. They also do some farming.

Stock and Farm Implements.—They keep little stock and few farm implements.

Education.—These Indians take much interest in the education of their children, and all the children of school age attend a neighbouring white school. One young lad attends the Richibucto grammar school, where he is qualifying as a teacher.

Characteristics and Progress.—These Indians are industrious and progressive.

BUCTOUCHE BAND.

Reserve.—This reserve is situated on the north side of the Buctouche river, in the county of Kent, about 3 miles above the village of Buctouche. It contains about 350 acres, of which 50 is cleared. The soil is fertile.

Population.—The population is 24, a decrease of 1.

Occupations.—These Indians do some farming, but they chiefly engage in making and selling Indian wares and in begging.

Education.—They take no interest in education.

Progress.—They are making no progress.

OTHER RESERVES.

The remaining reserves in this agency are not occupied by Indians, except Fort Folly reserve, in Westmorland county, on which three Indian families reside. Pockmouche reserve, in Gloucester county, and Tabusintac reserve, in Northumberland county, belong to the Burnt Church band. Pockmouche reserve contains 2,477 acres, chiefly woodland, growing small pine and spruce, with some bog-land. Tabusintac reserve contains 8,070 acres of woodland and timber-land, growing spruce, pine, hemlock, cedar and hardwoods. Big Hole reserve, in Northumberland county, is divided between Eel Ground and Red Bank bands; it contains 6,303 acres, part of which is covered with spruce and other timber and part with scrub pine. There is a valuable salmon fishing privilege in connection with this reserve, and another in connection with Pabineau reserve, in Gloucester county. Renous reserve and Indian Point reserve are both in the county of Northumberland; the former belongs to the Eel Ground Indians and the latter to the Red Bank band. They each contain 100 acres of good land. Fort Folly reserve, on the Petitcodiac river, in Westmorland county, contains 62½ acres, only a strip of which along the river is fit for agriculture, the remaining part consisting of high, stony land covered with spruce bushes.

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INDIANS NOT SETTLED ON RESERVES.

There are a number of Indians in this agency not settled on reserves. These, including the three families at Fort Folly, number 63. They gain a poor living by making and selling Indian wares and by begging.

REMARKS APPLYING TO THE WHOLE AGENCY.

Health and Sanitation.—Among the Indians of this agency there have been the usual number of cases of consumption and pneumonia. Noel Simute, one of the oldest, most respected and most progressive Indians of the Eel Ground band, was a victim of pneumonia. An epidemic of whooping-cough and measles carried off several of the children of the Eel Ground band. Diphtheria broke out among the children of the Big Cove band; the infected premises were promptly quarantined, and happily it was stamped out without any fatal cases. On the arrival of spring most of the Indian families cleaned their premises and lime-washed them.

Buildings.—The Indians living on the reserves generally occupy small frame houses. Many of these are comfortable, but others are badly built, and a poor protection against the cold. The Indians living off the reserves generally occupy small shanties, badly ventilated and dirty. Those who keep stock have small frame barns. The Burnt Church band has a school-house, church, council-house and lock-up on the reserve. The Eel Ground band has a church and lock-up; and the Big Cove band a school-house, council-house, lock-up and church. The Indian Island Indians have a church on their reserve, and so have the Fort Folly Indians. The Big Cove band last year constructed a bridge over a cove and gully which had formerly been without a bridge. This bridge is a great convenience to a great number of the band who were often in the spring cut off from communication with the other parts of the reserve.

Temperance and Morality.—The greater number of these Indians are temperate, but there are many who get liquor in spite of all efforts to prevent it. They are all peaceable, law-abiding, and, as a general rule, moral.

I have, &c.,

WM. D. CARTER.

Indian Agent.

NEW BRUNSWICK,

NORTHERN AND SOUTHWESTERN DIVISIONS.

FREDERICTON, June 30, 1906.

FRANK PEDLEY, Esq.,

Deputy Supt. General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my annual report and statistical statement for the year ended June 30, 1906.

NORTHERN DIVISION.

EDMUNDSTON BAND.

Reserve.—This reserve is situated in the county of Madawaska. It consists of 720 acres, of which 514 are forest lands; the remainder comprises intervale, highland and pasturage, the greater part of which is well adapted for farming purposes.

Population.—The population of the band is 48.

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Occupations.—The occupations of the Indians are hunting, guiding, milling, stream-driving, Indian wares and farming. The produce raised from farming is chiefly buckwheat, oats, potatoes, turnips and vegetables.

Health and Sanitation.—The health of the band has been fairly good. They were free from diseases of a contagious nature for the past year. Their dwellings are quite a distance apart. The winter refuse was removed as soon as the snow left the ground. The water used for domestic purposes is supplied from springs at a safe distance from their buildings.

Temperance and Morality.—Intoxicants to any extent are not indulged in by the band. Their morals are good. Most of the band are very industrious, and are very much respected by their white neighbours.

Education.—Some four or five of their children attend the free public school of the district. The majority of them, however, cannot be induced to attend.

TOBIQUE RESERVE.

Reserve.—The reserve is situated at the junction of the Tobique and St. John rivers. It consists of an area of about 15,000 acres of forest and farm lands. The forest land is noted for the lumber it produces yearly. All the lands north of the Tobique river, including the cleared and forest lands, are very fertile, and well adapted for farming purposes.

Population.—The population of this band is 185.

Occupations.—The occupations engaged in by the band are guiding, hunting, stream-driving, working in the woods, rafting timber, running rafts of timber from Tobique to Fredericton, the manufacture of Indian wares and farming. Farming, owing to the various employments engaged in by the band, is only carried on to a limited extent. They, however, raise sufficient crops, such as potatoes, wheat, oats and buckwheat to answer their immediate wants.

Health and Sanitation.—The health of the band was fairly good. They were visited with no diseases of a contagious nature for the past year. The sanitary regulations prescribed by the department were attended to in the early part of the month of May last. Their dwellings are mostly all frame buildings; they and their surroundings are neat and clean, and the mode of living followed by the Indians is much the same as that of their white neighbours. The water used for domestic purposes is conveyed from springs by two aqueducts from a hillside that is fully 100 rods from their houses, and which is well protected from refuse pollution.

Temperance and Morality.—The morals of these Indians are good. Only a few of them will indulge occasionally in the use of intoxicants. The erection of the lock-up on the reserve has had an excellent effect in respect to this habit.

Education.—The day school on this reserve for the past year was under the supervision of Miss E. H. Costigan. Some of the children are very regular in attendance, and are making good progress in their studies. Those, however, who are not regular in their attendance, through the indifference of their parents, are not doing so well as the former.

Characteristics.—The Indians of this reserve are peaceable and law-abiding, and are well thought of by their white neighbours. The majority of them are very industrious. Being good axemen and stream-drivers, their services are always in good demand at the regular wages. Another profitable employment to the band the past winter was the making of 1,000 pairs of snow-shoes, which were sold to the traders of Presque Isle, in the state of Maine, at good prices.

SOUTHWESTERN DIVISION.

WOODSTOCK BAND.

Reserve.—This reserve is situated 3 miles below the town of Woodstock. It fronts on the St. John river. It consists of 200 acres, 30 of which are cleared and used as

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pasturage and farming lands. The remainder is forest land that is covered with a growth of softwood, from which the Indians get their fuel.

Population.—The population of this reserve and upper Woodstock is 66.

Occupations.—The principal work followed by the able-bodied men is working in the lumber woods in winter season, and stream and river driving in the spring-time; while others find ready employment the year round from well-to-do farmers in the vicinity of the reserve. Farming, with the exception of a few garden patches, is not engaged in by the band.

Health and Sanitation.—The health of the band has been fairly good. They have been free from contagious diseases, and there were no deaths amongst them the past year. Their dwellings are detached from each other, and all winter refuse has been removed from their premises.

Temperance and Morality.—Their morals are good, and they all avoid the use of intoxicants.

Education.—None of their children, owing to their Indian habits, will attend the free school in the district, where they would be welcome.

KINGSCLEAR BAND.

Reserve.—This reserve is situated in the parish of Kingsclear, York county. It is 11 miles from Fredericton. It fronts on the St. John river, and comprises 460 acres, 360 of which are forest lands covered with a second growth of softwood; the remainder of the reserve is cleared and fenced, and is used by the Indians for farming and pasturage.

Population.—The population of the band is 110.

Occupations.—The occupations of these Indians are the manufacture of Indian wares, working in the lumber woods, stream-driving, rafting timber, labouring for farmers of the district and farming. In winter season most of their wares are sold to farmers in the vicinity and at Fredericton. In summer season a number of them with their families visit the different watering places along the St. John river, where they dispose of their fancy wares to tourists and others, from whom they receive good prices. Farming at this reserve, owing to the time devoted to other employments, with but few exceptions was very much neglected during the past year.

Health and Sanitation.—With the exception of a few cases of scrofula and consumption, the general health of the band has been good. Sanitary precautions by the removal of all winter refuse were attended to in the early part of May last.

Buildings.—All their dwellings are frame. They are of medium size and in good repair.

Temperance and Morality.—Their morals are good, and it is a rare thing to hear of the use of liquor amongst them. They are highly respected by their white neighbours for their civility and peaceful manner.

Education.—The day school on this reserve is taught by Miss Mary C. Monaghan, a second-class teacher. The children of school age are regular attendants. Their parents take a lively interest in their education; hence it is that the pupils are making good progress in the different studies taught.

ST. MARY'S BAND.

Reserve.—This reserve comprises but 2 acres of land. It is situated between St. Mary's and Gibson. It fronts on the St. John river, and is directly opposite the city of Fredericton.

Population.—The population of this reserve is 116.

Occupations.—The occupations of these Indians are hunting, guiding, stream-driving, loading deals in scows at the outlet of the Nashwack river, and Indian wares.

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Farming, owing to the limited size of the reserve, is not engaged in by any of the band. The young and middle-aged men find ready employment at milling and the loading of deals in summer season; whilst those of advanced years devote their time to the making of Indian wares.

Health and Sanitation.—The health of these Indians has been fairly good. They were free from contagious diseases the past year, and whilst the reserve is considerably crowded with dwellings, &c., the sanitary precautions prescribed by the department have been satisfactorily attended to.

Temperance and Morality.—Owing to the situation and surroundings of this reserve, these Indians are subject to many temptations. The majority of them are sober, industrious and law-abiding. There are, however, a few of both sexes that will occasionally indulge in the use of intoxicants. When this occurs it is not very edifying to the rising generation or better class of Indians.

OROMOCTO BAND.

Reserve.—This reserve is situated at Oromocto village, 11 miles below the city of Fredericton. It fronts on the St. John river, and consists of 125 acres, 30 of which are farming and pasturage lands; the remainder is forest land.

Population.—The population of this band is 74.

Occupations.—The principal occupation of these Indians is labouring work. In summer some of them work in saw-mills; others work for farmers of the district. In winter the able-bodied men either hire out as guides or work in the lumber woods. Those who remain at home engage in cutting cord-wood for the neighbouring farmers. Owing to the scarcity of suitable wood, very little is done in the manufacture of Indian wares. Notwithstanding the large amount of land in their possession, little attention is given to farming.

Health and Sanitation.—This reserve is favourably situated in the interest of health. It has several good springs, from which the Indians get water for domestic use. Their dwellings are detached, and the sanitary regulations prescribed by the department have been attended to. The health of the band has been fairly good. They were entirely free from contagious diseases during the past year.

Temperance and Morals.—The habits and morals of the band, without exception, are good.

Education.—There is no school on this reserve. There is, however, a free public school in the district, at which a few Indian children formerly attended; but on advising the Indians to continue sending their children to this school, I was informed that owing to over-crowding by white children there was no room for them during the present term.

General Remarks.—The remainder of the Indians of this agency, and a number of the Micmac Indians of the bordering provinces, are located in the villages of King's, Queen's, St. John and Charlotte counties. Their occupations are much the same as those of Indians of other parts of the agency. When in health the majority of the Indians are industrious, and willing to provide for themselves, but when incapacitated for work by sickness, accidents or old age, they naturally look to the department for assistance.

I have, &c.,

JAMES FARRELL,

Indian Agent.

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NOVA SCOTIA,
MICHAMCS OF ANNAPOLIS COUNTY,
ANNAPOLIS, June 30, 1906.

FRANK PEDLEY, Esq.,
Deputy Supt. General of Indian Affairs,
Ottawa.

SIR.—I have the honour to submit my annual report and statistical statement for the year ended June 30, 1906.

Reserve.—There are two reserves in Annapolis county, containing a combined area of 972 acres. No Indians reside on either, nor do they derive any benefit from the land.

Population.—The population of this agency is 64.

Health and Sanitation.—The health of the Indians has been fairly good. There have been no contagious diseases. Their dwellings are nearly all frame buildings, and are kept neat and clean. They willingly comply with all sanitary regulations.

Occupations.—They nearly all make an effort to grow some farm products, but their principal occupations are hunting, fishing, acting as guides to hunting and fishing parties, chopping for lumbermen, stream-driving, basket-making, &c.

Education.—The Indians living at Lequille send their children to the public school. The teachers report they make fair progress.

Characteristics and Progress.—Some of them are industrious and saving, but quite a number try to get along with as little work as possible; but all make a fairly comfortable living while enjoying good health, but sickness or accident finds them without any reserve to draw upon, then they need assistance.

Temperance and Morality.—The morals of the Indians are good, and in temperance they are steadily improving.

I have, &c.,
JOHN LACY,
Indian Agent.

NOVA SCOTIA,
MICHAMCS OF ANTIGONISH AND GUYSBORO' COUNTIES,
July 24, 1906.

FRANK PEDLEY, Esq.,
Deputy Supt. General of Indian Affairs,
Ottawa.

SIR.—I have the honour to submit my annual report and statistical statement for the year ended June 30, 1906.

Vital Statistics.—During the past year there has been an increase of 3 in the band, making the population of this agency 220. There were 16 births and 6 deaths during the year.

Religion.—The Indians are all Roman Catholics, and are very attentive to their religious duties.

Temperance.—As a rule the Indians are temperate, and not inclined to immorality.

I have, &c.,
JOHN R. McDONALD,
Indian Agent.

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NOVA SCOTIA,
 MICMACS OF CAPE BRETON COUNTY—ESKASONI AGENCY,
 CHRISTMAS ISLAND, June 30, 1906.

FRANK PEDLEY, Esq.,
 Deputy Supt. General of Indian Affairs,
 Ottawa.

SIR,—I have the honour to submit my annual report for the year ended this day.

Reserve.—The Eskasoni reserve is situated on the north side of East bay, about 30 miles from Sydney, C.B. It contains about 2,800 acres of land, over two-thirds of which is unfit for cultivation.

Population.—The population of the band is 135.

Health.—With the exception of an epidemic of chicken-pox among the children for two or three weeks, the general health of the band was good during the year.

Occupations.—The band follows a variety of occupations for subsistence, viz., farming, fishing, hunting, coopering, &c. In this way they make a fairly good living, with the exception of the old and sick among them.

Education.—They have enjoyed the privilege of a school among them for many years, and the children who attend regularly make fairly good progress.

Characteristics and Progress.—As a rule the Indians of this reserve are a very industrious, sober, honest, moral class of people; any deviation from this is rare indeed.

I have, &c.,
 A. CAMERON, P.P.,
Indian Agent.

NOVA SCOTIA,
 MICMACS OF CAPE BRETON—SYDNEY AGENCY,
 SYDNEY, June 30, 1906.

FRANK PEDLEY, Esq.,
 Deputy Supt. General of Indian Affairs,
 Ottawa.

SIR,—I have the honour to submit my annual report and statistical statement for the year ended June 30, 1906.

SYDNEY BAND.

The Indians of the Sydney band have two reserves. The one on which they all reside is situated on the east side of the harbour of Sydney, within the city limits, and contains 2½ acres of land, all of which is cleared and fenced in. The locality is pretty; the ground is naturally dry, with a gentle slope towards the harbour. The other reserve is situated at Caribou marsh, a distance of 6 miles from the Sydney reserve. It contains about 600 acres, nearly all of which is under wood. The soil is good, being mostly level land, with a considerable quantity of heavy timber. There are a few acres of intervale which produce some coarse hay, but as there are no Indians living there, they do not look after the hay. The only use the Indians make of this reserve is to get some wood and timber from there in winter-time.

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Tribe.—All the Indians of this agency belong to the Micmac tribe.

Population.—The population is 86.

Health and Sanitation.—The health of the band has been good during the year, no contagious or infectious diseases of any kind having existed among them. A few cases of pneumonia, from which two died, last spring, and some chronic cases of rheumatism were the principal complaints. The sanitary conditions are good. The reserve is supplied with water from the city reservoir, and sanitary arrangements are provided by which the sewage of the whole reserve passes through a large pipe laid underground into the harbour. The houses are neatly and cleanly kept, and both men and women are beginning to appreciate the benefits of personal hygiene.

Occupations.—The men mostly all labour on the streets in the employ of the Electric Tram Company, and laying sewer pipes for the city. The women do scrubbing and washing around town.

Buildings.—Their houses, although most of them are small, are quite comfortable. The Indians are now in the habit of giving them all a good coat of whitewash every spring, and much more attention is now given to internal arrangements than used to be heretofore. The grounds around the houses are also kept clean.

Education.—There is a fine school-house, with the necessary facilities for the comfort and instruction of the children, and a competent teacher constantly employed. The attendance at school is good, the children are making fair progress, and the parents are quite interested in the school.

Religion.—They are all Roman Catholics.

Temperance and Morality.—For the past year there has been no cause for complaint in these respects. All have been sober, and morally good as far as is known.

NORTH SYDNEY BAND.

There is no reserve at North Sydney, although a number of Indians have made their home there for years on a tract of woodland situated about a mile and a half from town, and which is private property.

Tribe.—They are all Micmacs.

Population.—The population is 56.

Health and Sanitation.—The health of these Indians has been pretty fair for the past year. There is now one case of lung tuberculosis, and an old case of chronic rheumatism.

Occupations.—These Indians engage in basket-making, coopering, hunting, and labouring around town.

Buildings.—Their buildings are somewhat primitive, being mostly shacks and a few camps, but the interior as well as the surroundings are kept clean.

Religion.—They are all Roman Catholics.

Temperance and Morality.—They are all sober, law-abiding and moral in their habits.

I have, &c.,

D. K. McINTYRE.

Indian Agent.

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NOVA SCOTIA,
MICHAMPS OF COLCHESTER COUNTY,
TRURO, August 25, 1906.

FRANK PEDLEY, Esq.,
Deputy Supt. General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my annual report, together with the accompanying agricultural and industrial statistics, for the fiscal year ended June 30, 1906.

Reserve.—The Millbrook reserve is situated 3 miles south of Truro. It contains an area of 35 acres, with a wood lot of 40 acres one-half mile from the reserve. There is also a small settlement near the village of Lower Stewiacke.

Population.—The number of Indians in the county is 101.

Health and Sanitation.—The general health of the Indians has been fairly good; yet, although the sanitary conditions in which they live compare favourably with those of the neighbouring whites, there have been 4 deaths from consumption in the past year.

Occupations.—The Indians on this reserve are employed in the town of Truro, on the neighbouring farms, in the lumber camps in winter, in saw-mills, and in railway construction; they also make basket-work, bead-work, hockey sticks, pick-handles, &c.

Education.—They have a school-house on the reserve; and the pupils who attend regularly are making good progress.

Characteristics.—The Indians are with few exceptions industrious and law-abiding, and are becoming more to be relied upon by their white employers.

Temperance.—As liquor is difficult to obtain, there is little complaint of drunkenness as far as the Indians are concerned.

I have, &c.,

ROBERT H. SMITH,
Indian Agent.

NOVA SCOTIA,
MICHAMPS OF CUMBERLAND COUNTY,
PARRSBORO', July 9, 1906.

FRANK PEDLEY, Esq.,
Deputy Supt. General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit the report of this agency for the fiscal year ended June 30, 1906, together with the usual statement of agricultural and industrial statistics covering the same period.

Reserve.—Franklin Manor reserve, the only reserve in this agency, is situated at Halfway river, about 14 miles from Parrsboro', and 35 from the town of Amherst. It consists of 1,000 acres of good land. The chief and more than half of all the Indians belonging to this county live at or near this reserve. The remainder are scattered more or less over the whole county, a few living at Springhill Junction, some at Amherst, quite a few at River Hebert, and a few at Pugwash and also at West Southampton.

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Population.—The total number of Indians in this county is 97.

Occupations.—Those Indians who live on or in the immediate vicinity of the reserve subsist partly from the produce of their farms, and partly from other industries, such as basket-making, manufacturing axe helves, tubs, mast hoops, &c., and nearly all hunt or act as guides for hunting parties.

Those living at Springhill Junction manufacture pick-handles, which they sell to the miners at Springhill.

Many of the young men work in the lumber woods during the winter months, stream-drive in the spring, and are employed about mills during the summer. The women pick and sell berries and mayflowers, and in winter make baskets.

Health and Sanitation.—The health of these Indians during the past year, with the exception of a few chronic cases of tuberculosis, has been very good.

For the most part their houses are kept clean.

Education.—Nearly all the young Indians in the vicinity of the reserve can read and write. The parents do not take as much interest in the education of their children as I could wish.

Religion and Morals.—These Indians are all Roman Catholics. During the past year there has been an improvement in their morals.

I have, &c.,

F. A. RAND,

Indian Agent.

NOVA SCOTIA,

MICMACS OF DIGBY COUNTY,

BEAR RIVER, June 30, 1906.

FRANK PEDLEY, Esq.,

Deputy Supt. General of Indian Affairs,

Ottawa.

SIR,—I have the honour to submit my annual report and tabular statement for the year ended June 30, 1906.

Reserve.—This agency is located $1\frac{1}{2}$ miles from the village of Bear River, and contains 1,600 acres, of which 48 is cultivated and 200 natural pasture; the remainder is second growth, chiefly hardwood.

Vital Statistics.—The population of this band is 112, of whom 20 live in Weymouth. There have been 5 births and 10 deaths, and 6 have moved away.

Health and Sanitation.—The general health of the Indians in this band with few exceptions has been good. Sanitary instructions have been observed, and in most cases the inside and outside of their dwellings are clean and tidy.

Resources and Occupations.—These Indians engage in hunting, basket-making, fancy-work of different kinds, act as guides for sportsmen, as day labourers, and a few farm a little.

Buildings.—The buildings are mostly frame, and are in good repair and comfortable.

Stock.—The stock consists of 3 cows.

Education.—They have one school-house on the reserve. The attendance is fairly good. The pupils learn quickly. The Indians are taking an interest in the school, and the advancement of education.

Religion.—All the Indians in this agency are Roman Catholics. They have a fine church on the reserve, where they assemble for religious services.

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Temperance.—The Indians on this reserve are temperate. There has not been a case this year where an Indian has been under the influence of liquor. They are moral and law-abiding citizens.

I have, &c.,

JAS. H. PURDY,

Indian Agent.

NOVA SCOTIA,

MICMACS OF INVERNESS COUNTY,

GLENDAL, July 12, 1906.

FRANK PEDLEY, Esq.,

Deputy Supt. General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my annual report and tabular statement for the year ended June 30, 1906.

Reserves.—This agency comprises two reserves, Whycocomagh, with an area of 1,555 acres, and Malagawatch, 1,200 acres.

Population.—During the year as many as 14 left the Whycocomagh reserve, so that the population there is now only 123. The people of Malagawatch number 19. The birth-rate at Whycocomagh was 40·7 per thousand, while the death-rate was 24. At Malagawatch the birth-rate was 41, and the death-rate 20.

Health.—The general health was good during the year. This year as usual the 'white plague' was in evidence.

Occupations.—Farming is becoming the main prop of support for a few families. Some girls hire out as domestics; some of the men as labourers. In the towns the latter have ample opportunity to earn a livelihood. Indian wage-earners are, to my mind, generally improvident. Bead-work, coopering, basket-making, fishing and such occupations are followed to some extent by nearly all.

Morals.—These Indians are a good class of people, but a few of them are trying to keep up with modern ideas and civilization, and one or two of them could afford to give their paler brothers a good handicap and have the inning.

I have, &c.,

DONALD McPHERSON,

Indian Agent.

NOVA SCOTIA,

MICMACS OF KING'S COUNTY,

STEAM MILLS, July 14, 1906.

FRANK PEDLEY, Esq.,

Deputy Supt. General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my annual report with statistical statement for the year ended June 30, 1906.

Reserve.—The Indians of this agency are scattered throughout the county, there being but two families on the reserve, which contains about 9 $\frac{3}{4}$ acres.

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Vital Statistics.—The population is 74, a decrease of 4 during the year. There were 4 deaths, 2 births and 2 migrated.

Health.—The health of the Indians is good, there being no infectious disease among them.

Religion.—The Indians of this agency are all Roman Catholics.

Occupations.—They do but little farming, depending on hunting, fishing, coopering, basket-making, acting as guides, &c.

Temperance.—There is but little drinking among them. ||

Morals.—Their morals are good, and they are fairly industrious.

Education.—There are no Indian schools, the Indian children attending school with the white children.

I have, &c.,

C. E. BECKWITH,

Indian Agent.

NOVA SCOTIA,

MICMACS OF HALIFAX COUNTY,

SHEET HARBOUR, June 19, 1906.

FRANK PEDLEY, Esq.,

Deputy Supt. General of Indian Affairs,

Ottawa.

SIR,—I beg to submit my annual report and tabular statement for the year ended June 30, 1906.

Location.—These Indians reside at various points in Halifax county, viz., Elmsdale, Enfield, Wellington, Windsor Junction, Waverley, Bedford, Dartmouth and Sheet Harbour.

Health.—On the whole the general health has been fairly good. No epidemic or contagious diseases have occurred.

Census.—It is difficult to keep even an approximate census, because during the summer many Indians come from other parts of the province to live in the vicinity of and within Halifax county.

Buildings.—The camp has about disappeared, and all the Indians are housed in frame buildings, except the rovers in summer, who adhere to the camp.

Character of Season.—Considerable seeding is being done, particularly in the line of potatoes. In most sections special attention is given to gardening; all products are secured in good condition.

Haying Season.—Those carrying stock generally secure a sufficient supply of hay and fodder, bringing the stock through the winter in good condition.

Fishing.—The lakes and rivers in this county are noted for excellent trout and salmon fishing, being very valuable to the Indians; also moose in hunting season is a very valuable asset.

Hunting and Trapping.—Fur-bearing animals are plentiful, and much sought after by the Indians. Prices are good. The past winter being mild and there having been very little snow made easy access to prosecute their pursuits.

Education.—It is the same to-day as in past years, and it is difficult to educate the Indians into attending school.

Morality.—Generally the Indians are law-abiding and sober. The stringent law in force forbidding the sale of intoxicating liquors to Indians has much to do with the general welfare, and prevents crime, which otherwise would no doubt be more frequent.

I have, &c.,

DANIEL CHISHOLM,

Indian Agent.

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NOVA SCOTIA,

MICHAMPS OF HANTS COUNTY,

SHUBENACADIE, July 10, 1906.

FRANK PEDLEY, Esq.,

Deputy Supt. General of Indian Affairs,
Ottawa.

SIR:—I have the honour to submit my annual report and statistical statement for the year ended June 30, 1906.

Reserves.—The reserves now under my care consist of the Indian Brook reserve, in the eastern part of Hants county, where the greater part of the band reside, and where farming is being engaged in to a considerable extent; and the St. Croix reserve, situated in the western part of this same county, which is a piece of woodland, and on which no settlement has as yet been made.

Population.—The population now is 100, a decrease of 2 in the year.

Health.—The general health of the band during the year has been good, as there were no diseases of a contagious character, and but few deaths from any cause.

Occupations.—The Indians of this county are engaged in such occupations as farming, fishing, coopering, basket-making, and occasionally they hire out in the lumber camps.

Buildings.—All are living in comfortable dwellings, some of which are neat, and compare favourably with those of white men.

Education.—Although the school has been closed on account of the poor attendance, there is still the belief among many that, could the young generation be persuaded to attend the school, it would work out for them a different future from what would be the case if education were altogether neglected, and that they would enjoy privileges which their parents never were prepared to enjoy.

Temperance and Morality.—There have been no cases of drunkenness reported during the year, and their moral behaviour certainly is to be commended.

I have, &c.,

ALONZO WALLACE,

Indian Agent.

NOVA SCOTIA,

MICHAMPS OF PICTOU COUNTY,

NEW GLASGOW, July 28, 1906.

FRANK PEDLEY, Esq.,

Deputy Supt. General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my annual report and statistical statement for the year ended June 30, 1906.

Reserves.—The Indians of Pictou county have two reserves. The larger reserve has a fine sea-board location, near the entrance of Pictou harbour, and contains 200 acres of land, a portion of which is cultivated and under crop. Over two-thirds of the Indians live on this reserve. The other reserve is an island in Merigomish harbour. This island is deserted during the winter months, and the Indians camp on the adjacent mainland.

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Tribe.—The Indians of these parts belong to the historic Micmac tribe, the aboriginal settlers of the maritime provinces, giving picturesque, descriptive Indian names to many rivers, lakes, mountains and indentations of the sea.

‘The memory of the red man, how can it pass away,
When his names of music linger on each mount, and stream and bay.’

Vital Statistics.—The present population of the Indian reserves of the county of Pictou is 168. There were 4 births during the year, and 5 deaths, 4 of which were of infants. One left the reserve to settle in New Brunswick. The total population is thus 2 less than last year's. The infant mortality is thus very large among the Indians, and large it seems to be everywhere among the various multitudinous races of mankind. How will the infant life of the race be preserved is the universal problem.

Health and Sanitation.—The health of the Indians, in general, has been good during the year. There was one adult death from consumption. They have been immune from any epidemic or contagious disease.

Resources and Occupations.—These Indians make a living by farming, fishing, making baskets, pick-handles, and hiring out as labourers. They live from hand to mouth, are happy and contented, and die with visions of blissful immortality—the happy Indians.

Buildings.—The greater number possess frame buildings for dwellings, which are large and more comfortable than the camps of years gone by. There are a few barns on their land. There is a hall and a fine church on the Island reserve.

Education.—There is a good school in operation at the Fisher Grant reserve, which is well attended during the winter months, the children are intelligent.

Religion.—All the Indians are Roman Catholics and have clung with unalterable fidelity to the ancient faith preached to their pagan forefathers by zealous missionaries from France, the beloved and historic black-robos.

Temperance and Morality.—These Indians are on the whole remarkably sober, honest and truthful. They take the pledge of total abstinence at their annual mission, on St. Ann's feast, and keep it, with very few exceptions, for the year.

I have, &c.,

J. D. MACLEOD.

Indian Agent.

NOVA SCOTIA,
MICMACS OF QUEEN'S AND LUNENBURG COUNTIES,
CALEDONIA, August 24, 1906.

FRANK PEDLEY, Esq.,
Deputy Supt. General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my annual report and statistical statement for the fiscal year ended June 30, 1906.

Reserves.—There are three reserves in this agency of 1,000 acres each, two in Lunenburg county, and one in Queen's county. There are Indians living on the three reserves, who are making their living chiefly by farming. There are others living in Lunenburg and Bridgewater, in Lunenburg county, and at Milton, Mill village and Caledonia, in Queen's county. Those not residing on the reserves live by fishing, hunting, basket-making, and working in the lumber camps.

Population.—The population of this agency is 170—46 males and 44 females in Lunenburg county, and 43 males and 37 females in Queen's county.

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Health and Sanitation.—The health of the Indians during the past year has been good. The sanitary regulations with regard to the buildings are well observed.

Education.—There is only one school in this agency at New Germany, Lunenburg county, the pupils of which are making good progress.

Religion.—All the Indians of this agency are Roman Catholics.

Characteristics.—The Indians of this agency, with few exceptions, are industrious and law-abiding,

I have, &c.,

CHARLES HARLOW,

Indian Agent.

NOVA SCOTIA,

MICMACS OF RICHMOND COUNTY,

BROOK VILLAGE, June 30, 1906.

FRANK PEDLEY, Esq.,

Deputy Supt. General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my annual report and statistical statement for the fiscal year ended June 30, 1906.

Reserve.—Chapel Island reserve is situated on the south side of Bras d'Or lake. It contains 1,200 acres of good land, 320 of which are under cultivation.

Population.—The population of the reserve is 123.

Health and Sanitation.—The general health has been good during the past year. There have been 3 deaths, 2 of which were caused by consumption and 1 by stomach trouble. The sanitary regulations regarding dwelling-houses have been fairly observed.

Occupations.—The majority of the Indians engage in farming more or less. Other pursuits followed by them are hunting, fishing, coopering, timbering and hiring out as labourers.

Education.—The school on the reserve has been well attended during the past year, and fair progress has been made.

Characteristics and Progress.—The Indians on the whole are industrious and law-abiding, and year after year they are improving in their habits. Several are quite independent, and do not require any relief supplies.

Temperance and Morality.—They are all, without exception, of temperate habits, and their moral character is excellent.

I have, &c.,

JOHN FRASER,

Indian Agent.

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NOVA SCOTIA,
MICHAMAS OF SHELburnE COUNTY,
SHELburnE, July 2, 1906.

FRANK PEDLEY, Esq.,
Deputy Supt. General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my annual report and statistical statement for the fiscal year ended June 30, 1906.

Reserves.—There being no reserve in this agency, the Indians are scattered over the county.

Population.—The population of this agency is 29.

Health and Sanitation.—During the past year there has been a great deal of sickness, but at the present time, with the exception of 2, the health of the Indians is fair. Two have died of consumption. Sanitary measures are well observed, whitewash being freely used. The houses present a clean and tidy appearance.

Occupations.—The principal pursuits are fishing, hunting, and hiring out as labourers.

Buildings.—The buildings in this agency are of logs and frame, and are kept in good repair.

Education.—Very few of the children attend school, as they reside quite a distance from the school-houses.

Characteristics and Progress.—The Indians in this agency are a law-abiding class of people. A few of the band are becoming from year to year more industrious. They are quite independent, and do not require much assistance. Others are very poor.

Temperance and Morality.—With the exception of one, they are all quite temperate.

I have, &c.,

JOHN HIPSON,
Indian Agent.

NOVA SCOTIA,
MICHAMAS OF VICTORIA COUNTY,
BADDECK, July 9, 1906.

FRANK PEDLEY, Esq.,
Deputy Supt. General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my annual report and statistical statement for the fiscal year ended June 30, 1906.

Reserve.—There is only one reserve in this county, situate at Middle River, about one mile west of the village of Nyanza. It consists of 650 acres, 60 of which are in a good state of cultivation, 200 acres cleared but not under cultivation, and the remainder covered with a second growth of light timber. The soil generally is fertile, being especially adapted for raising hay.

Tribe.—These Indians are all Micmacs.

Vital Statistics.—The population is 100, comprising 26 men, 26 women, and 48 children and young people under twenty-one years.

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Health and Sanitation.—The health of the Indians on this reserve for the past year has been good. They observe sanitary regulations about their dwellings fairly well. During the present season all their dwelling-houses, outhouses and barns have been whitewashed with lime.

Resources and Occupations.—The principal pursuit is farming. A large number of the men are employed as labourers during the summer months. Cutting pit timber for the coal mines in the county of Cape Breton furnishes employment in the winter months for a large number of the Indians.

Education.—There is a good school on the reserve. The attendance was fair during the past year.

Religion.—The Indians are all Roman Catholics. There is no church on the reserve.

Characteristics and Progress.—They are an industrious and law-abiding class of people. There has been a marked improvement of recent years in their manner of living. They live in neat, comfortable dwelling-houses, and quite a few of them take pride in keeping their buildings in a neat and tidy manner. With the exception of a very few families, they seem to take quite an interest in farming.

Temperance and Morality.—I am happy to report that they are strictly temperate and moral in their habits.

I have, &c.,

A. J. MACDONALD,

Indian Agent.

PRINCE EDWARD ISLAND,

MICMACS OF PRINCE EDWARD ISLAND,

HIGGINS ROAD, July 5, 1906.

FRANK PEDLEY, Esq.,

Deputy Supt. General of Indian Affairs,

Ottawa.

SIR,—I have the honour to transmit my report and tabular statement in connection with the Indians of Prince Edward Island for the fiscal year ended June 30, 1906.

Reserves.—There are two reserves in this superintendency, viz., Lennox Island reserve and the Morrell reserve. The former is an island in Richmond bay; it contains an area of 1,320 acres. The latter is situated on lot 39 in King's county; it contains 204 acres of good land.

Population.—The population of this superintendency, comprising both reserves and other localities in Prince Edward Island, is 284 souls.

Health and Sanitation.—The health of the Indians has been fairly good during the year.

Occupations.—The Indians make a living by farming, fishing, and by the manufacture of Indian wares. There was a great improvement in fishing this year. A good many more sail-boats were provided. They fish for cod in the summer season, and for oysters in the autumn.

Buildings.—The dwellings on the reserves are frame houses. Some of these are well finished outside and whitewashed with lime, having a neat appearance. The barns are also frame buildings.

Stock.—The Indians residing on the reserves keep horses, cows and pigs.

Farm Implements.—The Indians are well provided with ploughs and spring-tooth harrows; there are a few cultivators.

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Education.—There is but one school, located on Lennox Island reserve, attended by 16 children, who are making fair progress.

Temperance.—On this subject I am pleased to be able to report that those residing on the reserves are very sober. As I reported last year, they organized a temperance society on Lennox island some years ago; it has done a great deal of good. Mr. Lemuel Bernard is the president. The members meet once a month.

I have, &c.,

JOHN O. ARSENAULT,

Indian Superintendent.

PROVINCE OF MANITOBA.

BIRDLE AGENCY.

BIRDLE, July 10, 1906.

FRANK PEDLEY, Esq.,

Deputy Supt. General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit the following annual report, together with agricultural and industrial statistics, for the fiscal year ended June 30, 1906.

Tribes.—There are eight reserves in this agency. Four are occupied by the Saulteaux and four by the Sioux or Dakotas, who receive no annuity, but were given reserves, cattle and some farm implements, so as to enable them to make their own living in farming and cattle-raising, which the majority are now doing very well. The Saulteaux are a branch of the Ojibbewa tribe, and receive an annuity of \$5 each, and for each councillor \$15 and each chief \$25.

BIRDLE SIOUX BAND, NO. 57.

Reserve.—This reserve has an area of 6,400 acres, and is located at the junction of the Birdtail creek and Assiniboine river. The land is a light loam, and well adapted for the growing of grain, corn and root crops. The soil in the valley is heavier and suitable for grain-growing. The hay-supply is secured in the valley along the Assiniboine river and on section 26, township 14, range 27, west of the 1st meridian. The wheat and oat straw is saved, and fed to stock during the winter months.

There are about 600 acres in wood, mostly scrub, consisting of oak, elm, maple and small poplar. The Assiniboine river borders the south and west, and the Birdtail creek runs through the northwest portion of the reserve. The Grand Trunk Pacific railway will run through the reserve, along the valley of the Assiniboine river, and cross the Birdtail creek in a northwesterly direction. Beulah is the nearest post office, being 5 miles east.

OAK RIVER SIOUX BAND, NO. 58.

Reserve.—This reserve has an area of 9,700 acres, and is located about 8 miles north of Griswold, Man., a town situated on the main line of the Canadian Pacific railway. The soil is a mixture of light and heavy loam, and is well adapted for the raising of wheat, corn and roots of all kinds. Wheat grown on this reserve generally grades No. 1 hard. Some of the land is stony and sandy, and is only used as pasture. The hay-supply is cut on the river flats, and, as the wheat and oat straw is saved, there is ample feed for stock. There are about 1,000 acres in wood, mostly elm, oak and poplar; with the exception of the elm, the growth is small. The Oak river runs

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through the northeast corner, and empties into the Assiniboine river. The Assiniboine river is the southern and part of the eastern boundary of the reserve.

OAK LAKE SIOUX BAND, NO. 59.

Reserve.—This reserve has an area of 2,560 acres, and is located about 4 miles north of Pipestone, Man., a small town on a branch of the Canadian Pacific railway (Arcola branch). A branch line of the Canadian Northern railway (Carmen and Hartney sections) touches the northeast corner. The soil is a sandy loam, suitable for raising wheat, corn and roots of all kinds. There are about 1,050 acres suitable for cultivation. There are about 150 acres in wood, principally ash, elm, maple and poplar, and 1,500 acres in hay-lands. The Pipestone creek flows through the eastern portion of the reserve.

TURTLE MOUNTAIN SIOUX BAND, NO. 60.

Reserve.—This reserve has an area of 640 acres, and is located on the northern base of the Turtle mountains. There are 10 acres in wood and the remainder is suitable for cultivation and pasture-land. Deloraine, Man., a small town on a branch of the Canadian Pacific railway (Lyleton branch), is the nearest town and post office.

KEESECKOOWENIN'S BAND, NO. 61.

Reserve.—This reserve is located on the Little Saskatchewan river and on the southern base of the Riding mountains, and has an area of 6,600 acres. The Indians of this reserve have also a fishing station on the northern shores of Clearwater lake, about 12 miles northeast of the reserve. The soil is a black loam and is suitable for raising grain and roots of all kinds. There is good pasture for stock. In the flats along the river there are large hay-meadows irrigated by the Little Saskatchewan river, which runs through the reserve from north to south. The reserve is well adapted for stock-raising. There are numerous small lakes and ponds on the reserve. There are 1,000 acres in wood, mostly small poplar. Fires have destroyed most of the large timber. The Canadian Northern railway (Clan William branch), runs through the southeast corner of the reserve. Elphenstone, Man., is the nearest post office, being situated a short distance from the south boundary of the reserve.

WAYWAYSEECAPPO'S BAND, NO. 62.

Reserve.—This reserve has an area of 24,960 acres, and is located about 15 miles in a northeasterly direction from Birtle, and 5 miles west of Rossburn, Man. The Birdtail creek runs through the northeast corner of the reserve. In the southern and western portions there are numerous lakes, ponds and hay-meadows. The soil is a heavy black loam and is suitable for stock-raising and the growing of grain and roots of all kinds.

GAMBLER'S BAND, NO. 63.

Reserve.—This reserve has an area of 774 acres, and is situated on Silver creek. The Assiniboine river is on the west side and Binscarth, Man., a small town on the Northwestern branch of the Canadian Pacific railway, is 5 miles northeast from the reserve. The soil is a black sandy loam, with poplar bluffs and some scrub oak, and is well adapted for the growing of grain and root crops.

ROLLING RIVER BAND, NO. 67.

Reserve.—This reserve has an area of 12,800 acres, and is situated about 8 miles north of Basswood, Man., a small village on the Canadian Pacific railway (Minnedosa

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and Yorkton section). The reserve is undulating, with a great deal of poplar and willow bush. There are numerous lakes (four of which contain fish), ponds and hay-meadows. The soil is a rich black loam, suitable for grain-growing and root crops. There are 4,500 acres in wood, principally poplar. The Rolling river runs through the eastern portion of the reserve from north to south. The Canadian Northern railway (Clan William branch), runs past the northern boundary of the reserve.

REMARKS APPLYING TO THE WHOLE AGENCY.

Population.—The population of each band is as follows:—

Birdtail Sioux Band, No. 57.. . . .	74
Oak River Sioux Band, No. 58.. . . .	268
Oak Lake Sioux Band, No. 59.. . . .	64
Turtle Mountain Sioux Band, No. 60.. . . .	10
Keeseekoowenin's Band, No. 61.. . . .	138
Waywayseecappo's Band, No. 62.. . . .	175
Gambler's Band, No. 63.. . . .	13
Rolling River Band, No. 67.. . . .	98

Total population. 840

Health and Sanitation.—The health of the Indians in this agency, during the year, has on the whole been good; tuberculosis was the principal cause of death amongst the young children. Grippe was prevalent on the reserve in the spring, but there were no deaths reported. In the spring, most of the Indians leave their houses and live in tents. All refuse that accumulates about their houses during the winter months is raked up and burned. Houses are, in most cases, lime-washed inside and out during the summer months. Their houses, with a few exceptions, are kept very clean. The majority of the Indians are clean about their persons, and take a pride in keeping themselves clean and well dressed.

Resources and Occupations.—The Sioux bands of this agency are nearly all good practical farmers, and with the exception of the very old men, make a good living, cultivating the soil and raising cattle and horses. They will have in crop, season 1906, wheat, 3,132 acres; oats, 551 acres; barley, 12 acres, and 73.50 acres in gardens, total, 3,768.50 acres.

These bands add to their earnings by the sale of fur, senega-root, fish, wild fruits, bead-work, baskets and mats, which command a good market, and for which good prices are obtained from the merchants in the vicinity of their reserves. The prospects are excellent for a record crop this season, 1906. The Saulteaux bands are not very good farmers, and have not the same determination as the Sioux, being more easily discouraged, and a death in a family will be an excuse to let their cultivated land lie fallow, and in most cases they will wander about gathering senega-root and visiting other reserves. There are a number, however, who are good farmers and are making progress. A number also work out as farm labourers, and some find employment on the river-drives in the spring. The farmers grow wheat and oats, raise cattle and horses. Nearly all heads of families have small gardens. A large number of these bands earn their living hunting, fishing, gathering senega-root, making baskets, mats and doing bead-work. Their principal source of income, however, is from the sale of furs and senega-root. Most of these Indians make a good living for themselves and families from the above industries, and prefer this way of making their living, as being less laborious than cultivating the soil. A number, however, are making efforts to cultivate the land, and in time, others will be compelled to do the same. The acreage cultivated this season, 1906, is as follows: wheat, 155 acres; oats, 560 acres; barley, 2 acres, and gardens, 27.25 acres; total, 744.25 acres, an increase over last season of 194.25 acres.

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Buildings.—Most of the houses erected during the year have been good-sized ones, with shingled roofs, and several Indians have built frame ones. Stables have also been improved on all the reserves. The tendency of nearly all the Indians is to improve their houses and stables.

Stock.—Horses and cattle on all the reserves are in excellent condition. The bulls are well cared for, and the calf crop this season good. A large number of the Indians on the different reserves have suitable heavy horses to do their farm work, and this number is increasing. The past winter was most favourable for stock.

Farm Implements.—The Indians of the Sioux reserves are well equipped with the latest farm machinery, and have up-to-date sulky and gang-ploughs and binders, &c. They have two steam threshing-machines. All the machinery is their own property, and is paid for by the Indians themselves.

The Saulteaux are also very well equipped, and a number have their own implements. The department assists some of these bands with seed-drills and disc-harrows. Nearly all have wagons, bob-sleighs, mowers, horse-rakes, &c. Good care is taken of these farm implements, and in most cases implements are under cover.

Education.—There is one boarding and two day schools in this agency. The boarding school is situated in the town of Birtle, and has an attendance of 50. The progress made during the year by the pupils has been principally in speaking English, writing, reading, number work and drawing. The older girls have made progress in cooking, bread and butter making, sewing, &c. The staff is efficient and devoted to the work, which is the principal reason of the good work done in this institution.

The Okanase day school is on Keeseekoowenin's reserve. The teacher is the Rev. James M. Macalister. The average attendance is between 4 and 5. Very little progress can be expected, as the attendance is too small; some little advancement is made, however, in reading and writing by the pupils who attend regularly. The Oak River Sioux day school has been closed part of the year, owing to the teacher leaving. It will be reopened during the summer, the Rev. J. Maggrah having been appointed as teacher.

There are a number of the Indians who take an interest in the education of their children, but I am sorry to report that the greater number are quite indifferent, and in many cases it takes considerable persuasion to induce their parents to send them to school instead of having them run wild about their reserves. A number of young people from this agency are attending the Elkhorn, Regina and Brandon industrial, and the Pine Creek and Cowessess boarding schools.

Characteristics and Progress.—The Indians on the whole have made advancement and are getting better off each year, although some, who have met with reverses, i.e., death in their families, have gone back, having neglected to put in their usual crop this season. These no doubt will take hold again next year, and will surely make an effort to keep up with the more advanced members of their bands.

The acreage under crop has been increased, and the yield for the season of 1905 was largely in excess of the previous one, the figures being as follows: wheat, 50,858 bushels; oats, 26,033 bushels; barley, 366 bushels; corn, 263 bushels; potatoes, 3,358 bushels; and other roots, 646 bushels. This represents a money value of \$38,414, a substantial increase over last year. This showing is a practical proof of the progress being made by the Indians during the year, which I trust will continue.

The Indians are law-abiding, and on the whole industrious. There are a number, however, who are indolent, and will never settle down on the farm, but seem contented to live on their friends, earning an occasional dollar to buy themselves luxuries in the way of tea or tobacco. They seem quite contented to live in this way, and will never make farmers. A number are quite happy living the old life, hunting, trapping during the winter months, and gathering senega-root during the summer. Good wages have been made from these industries during the past year, and the Indians have lived well, and have been very comfortably clothed.

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Temperance and Morality.—During the year there have been eight convictions against persons for selling intoxicants to Indians, and two convictions against Indians. Two Indians were fined for being drunk, and five received sentences of one month each in jail. One of the Indians convicted for selling to other Indians, being unable to pay the fine, was sentenced to three months in jail with hard labour. The other Indian paid his fine.

The majority of the Indians are not addicted to the use of liquor. A number, however, will take it whenever they can buy it, and in a great number of cases it is given to the Indians by disreputable white men, who frequent the attractions held all over Manitoba during the summer in the towns. These men are generally intoxicated, and if an Indian happens to be in their vicinity they pass the bottle for him to take a drink, and the Indian very seldom refuses. During the last four months of the year no cases have come under my notice. The heavy fines imposed in two of the cases in September, 1905, have had a good effect, and the Indians of the Saulteaux bands have so far kept themselves clear from charges on this head. The morality of the Indians in this agency is good; of course there are exceptions, as there are in every community, but on the whole, under the circumstances in which they live, they are to be commended for their general good conduct.

Crops.—The weather conditions for the season of 1906, were favourable, and the land was in splendid condition for seeding. There was a good rain fall on the night of May 24, 1906, and wheat was up above ground about three inches. The weather was cold for about a week in May, with light frosts, but no damage was done to growing crops. In June and July the growth was rapid, grain being well headed out, and the prospects are very bright for a good crop. Wheat-cutting will commence about the second week in August.

General Remarks.—The year just closed has been very encouraging. The crops harvested, season 1905, were excellent and the yield of grain and roots was above the average. Good prices were realized and the Indians expended the money judiciously. A good many old accounts were paid off, and good serviceable clothing purchased, and provision made for the winter's food-supply. Marked advancement has been made during the year, which, I am sure, will continue. A number of ex-pupils of the industrial schools have been assisted by the department in the purchase of teams of horses, harness and also lumber to build houses. In most cases the young men have made a fair start in farming, having from 10 to 45 acres in wheat this season, 1906. The training received in the schools will be of great value to them, and these young men should be, in time, the most prosperous and advanced on their reserves.

The annual meeting of the Indian Y.M.C.A., Sioux bands, was held on the Oak River Sioux reserve, Griswold, Man., from June 20 to 23, 1906. The meeting was well attended, and I believe good work is being done by the Association. The Birdtail Sioux congregation of the Presbyterian Church, gave as their contribution for the year, \$175.36 to missions.

There has been no change in the staff, all have been faithful in the discharge of their duties, and have assisted materially in the work of the agency. The missionaries on the reserves have continued in their assistance in the advancement of the Indians under our united charges.

I have, &c.,

G. H. WHEATLEY,

Indian Agent.

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MANITOBA SUPERINTENDENCY,
CLANDEBOYE AGENCY,

SELKIRK, August 1, 1906.

FRANK PEDLEY, Esq.,
Deputy Supt. General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit the report of the Clandeboye agency for the year ended June 30, 1906.

The agency comprises three bands, viz.: St. Peters, Brokenhead River, and Fort Alexander.

ST. PETERS BAND.

Reserve.—St. Peters reserve lies along the Red river, extending back 4 miles on each side, giving it an approximate width of about 8 miles. It has a river frontage of about 12 miles from north to south, and contains 80 square miles. Each side of the river is divided into the 'inner' and 'outer' 2 miles. The inner 2 miles is subdivided into lots varying in width from three to six chains, and extending back from the river-bank 2 miles. The outer 2 miles on the west side is subdivided into sections, and these again into legal subdivisions. The outer 2 miles on the east side has as yet not been so subdivided. The dwelling-houses and other buildings are all situated along and facing the river. Very few are settled back on the outer 2 miles. Those that have settled there appear to have done better, as they have made stock and more grain to sell, devoting themselves almost entirely to farming. The land in its primitive state was either bush-land or open swamp. There have been no extensive clearings made. A few acres have been cleared around where the buildings are located. The open swamp is situated on the north end of the reserve, and makes splendid hay-grounds for the Indians. The land is a loam, with a clay subsoil.

Population.—The population of the St. Peters reserve is 1,159.

Health and Sanitation.—There has been considerable sickness in the agency during the year. On St. Peters reserve there were a number of cases of diphtheria in September, and again in January and February; but owing to the effective quarantine established by the medical officer, Dr. Steep, the outbreaks were confined to just a few families. There are many old people on this reserve—two women who have overtaken the century mark. A large number of both men and women have passed the allotted span of life of three-score years and ten. They require some attention from both the medical officer and the agent. Their sons and daughters have families of their own, and are usually themselves well up in years, so that the department is very frequently called upon to assist these aged people, particularly during the winter season. The Dynevor hospital contributes somewhat towards the maintenance of the sick on this reserve.

Occupations.—The season was favourable for the seeding, growth and maturing of crops; but there is a very slight increase in the acreage under cultivation. Those living along the river frequent the town of Selkirk, gaining a somewhat precarious sustenance working at the mills or other employment as labourers. Some work at the fisheries at the lake or on the boats. Those who follow these employments are as a class not very careful of their earnings. The department, at the request of the St. Peters Indians, last year built 7 miles of heavy barbed wire fence along the north and east boundary of the reserve, and inclosed a large area of good hay-land. The country lying adjacent to the reserve is thickly populated, and the settlers' cattle made this hay-land their pasturage. As a result of the protection afforded by the

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fence, hundreds of tons of hay were saved to the Indians. During the winter of 1906 the market of Selkirk was almost entirely supplied by hay brought in by the St. Peters Indians, from which they derived a large revenue. During the winter of 1906 permission was given by the department to cut and sell dry wood. Three thousand five hundred cords were cut and marketed, for which they obtained an average of \$2 a cord.

Buildings.—The dwelling-houses and stables, with three exceptions, are built of logs, but are shingled, and present a very tidy appearance.

Stock.—There are 163 horses on St. Peters, of which over 100 are brood mares. The selling of horses affords some considerable revenue. There are over 500 head of cattle, over 200 of which are milch cows. As pasturage and hay are plentiful and material for stabling easily obtained, the stock is generally wintered in good condition.

Farm Implements.—Those that are farming are gradually acquiring such implements as are necessary for their work. A few brush-breakers have been distributed on the reserve, and are a great assistance to the Indians in their endeavours to break up and cultivate new land. These ploughs are useful only in breaking, but are passed around from one to another. The cost of these is too much, however, for the limited use to which they can be put. The St. Peters Indians are well supplied with wagons, sleighs, mowers and rakes. A few have binders. One firm states that it sells on an average about \$2,000 worth of implements yearly to the Indians of the St. Peters reserve.

Education.—There are five day schools on this reserve. The South St. Peters school, Miss Ridgeway, teacher, holding a second-class certificate, is situated in the south end of the reserve, and is well attended. The Muckle's Creek school, Mrs. Fitzgerald, teacher, is situated on the western boundary of the reserve, and has a very low average attendance. This is owing to the fact that there are but few children in the neighbourhood. Those that are there attend very regularly. The Trindle Chapel, or North St. Peters school, has a low attendance from the same cause. The Harper school is situated in a more densely populated part of the reserve, but the children are divided in numbers between this school and the Roman Catholic school about half a mile distant on the same side of the river. The Harper school is under the charge of Peter Harper, who had his training in St. Paul's industrial school; and the Roman Catholic school is under Miss Fitzgerald, a graduate of St. Mary's Academy. The Red river militates against regular attendance at these schools along the river, for it is often unsafe for children to cross in small skiffs and canoes, and in the spring and fall altogether impossible. The Roman Catholic school was thoroughly repaired within the year by the department.

Characteristics and Progress.—Measured by the material progress of the surrounding settlers, the Indian has not advanced as rapidly as his well-wishers had hoped for. The Indian of St. Peters has become the hewer of wood and drawer of water to the white man. The weekly or monthly payment of wages and the credit allowed him in the meantime in the small stores or trading posts connected with the various industries with which he may be employed attracts him away from any effort at agriculture, and from the reserve. The St. Peters Indians as a class are good labourers, and expert with the ordinary implements of industry; handy men on boats and steamers. Last year one held the position of master on a large steamer, and another on a smaller steamer, while many hold subordinate positions. But whatever their success may be as wage-earners, frugality is characteristic of very few. The men who leave the reserve for employment are associated in work with white men; which association, while they learn to be good workmen, is not conducive to their moral elevation, and they become accustomed to all the privileges and license indulged in by those with whom they are. Evil habits formed away from the reserve they bring back with them, and living as they do so closely adjacent to a town like Selkirk, with its population of 3,000 people, and where there are many who by lifelong

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acquaintance are in sympathy with many of those on the reserve, it is a difficult matter for the officers of the law to maintain as strict surveillance as one would wish. The band as a whole is fairly law-abiding, intemperance being the principal offence. Some are fairly well off, but many are poor, possessing nothing but what they earn, and spending it as soon as earned.

Temperance and Morality.—The Indian cannot be judged, nor his conduct measured from the meridian of morality drawn for the white man. Out of a population of about 1,300, there are not many drunkards, and the band may be said to be temperate. The police court record shows that a number of St. Peters Indians come before the local magistrate, but there is a repetition in the names, and such constitute a small percentage of the population. There are others who drink, but they do it slyly, and manage to keep out of the hands of the officers of the law. There would appear to be much immorality among the women. The police court records in Winnipeg contain the names of a few. The trouble lies in the women seeking other associates than are found among their own people, but who are more aggressive, and they become the victims of their own vanity.

BROKENHEAD BAND.

Reserve.—This reserve lies along the Brokenhead river, near the mouth. It contains 21.90 square miles. It is covered for the most part by dense poplar bush, especially along the river bank. There is some marsh-land along its western side.

Population.—The population, according to the pay-sheet at the last annuity payments, is 166.

Health and Sanitation.—This reserve has had its own share of sickness, though it has had very few deaths. In the spring, during the months of March and April, it was visited by an epidemic of scarlet fever and measles. Those who live in their houses the year round keep them clean.

Occupations.—Hunting, fishing and gathering snake-root are the principal employments of the men in this band. A few of the younger men go away as labourers. There is practically no land tilled. A few have gardens, and these this season look well. Last season the potato crop was destroyed by the potato bug. It was the first time the Indians had been visited by this plague and they failed to deal with it successfully, and as a result the whole crop was destroyed. This season the potato crop was good, as the bugs had been watched and destroyed. On account of a bar which has formed this last few years at the mouth of the Brokenhead river, and which has prevented the fish tugs entering the river, fishing as an industry has dwindled and the fish station and freezer erected there some years ago has fallen into ruin. Those of the band who fish have to go to the lake, away from their homes and families. For this reason they do not work as steadily as they could if the conditions were different. These Indians still want to follow the occupation of their forefathers, but the rapid settlement of the land all around this reserve within the last five years has practically driven out all wild animals. A few moose, deer, bear and other wild animals occasionally are found. The stringent game laws of the province deter the Indian from the free pursuit of these animals. These laws are the burden of a continuous complaint from the Indians. The object of the game laws has been repeatedly explained to them, and the disappearance of the buffalo through the absence of such laws has been held up to them as an exemplification of the necessity for such protection, and they are being urged to raise cattle as a surer method of supplying themselves with food.

Buildings.—The houses are all log walls and shingled roofs. During the year 1905 15 houses were built on the reserve, to take the place of many old huts.

Stock.—There is no stock worth mentioning on the reserve. Three or four have some cows and horses.

Farm Implements.—As there is no farming here, there are no implements. The department supplied them with a wagon this year, as there was nothing of the kind

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on the reserve. This can be used to haul wood to the school and to the church and for themselves, also for hauling hay. They have been supplied this year with a brush breaker, and they have promised to make a start at getting some land cleared up and broken for next season.

Education.—There is one day school on the reserve, under the auspices of the Church of England, with Mrs. (Rev.) R. E. Coates, the wife of the missionary, in charge. She takes great interest in her work, and, if the children are not at school, makes it a point to ascertain the cause. As a missionary the Rev. Mr. Coates has clothing sent him for distribution, and thus warm clothing is assured to many who otherwise would be unable to obtain it. The average attendance is high. The school building was thoroughly repaired this year by the department.

Characteristics and Progress.—This band is governed still by old Indian customs. There are still many of them pagans, and many who are nominally Christians are under the influence of paganism. At the last annuity payment one young girl was brought before the chief on the charge, laid by one who was nominally a Christian, of having had in her possession 'bad medicine.' It was found that she had had in her possession a small piece of wood about an inch long, carefully wrapped in many cloths, and tied carefully with many strings. She was allowed to go on a reprimand, and the little piece of wood was taken out by one of the councillors, who after building a fire carefully burned it. They have made very little progress, and at some seasons of the year the whole band was in want.

Temperance and Morality.—These Indians have not been addicted to intemperance, but the close settlement on all sides of them is compelling them to mingle more with white men. There are now villages within a few miles of them, whereas a few years ago Selkirk was the nearest town, with which the reserve was connected by roads that at some seasons of the year were impassable, and always difficult. In this way they were more or less isolated. There was an outbreak of intemperance this year, not on the reserve, but while away gathering and marketing snake-root. Everything has since quieted down.

FORT ALEXANDER BAND.

Reserve.—This reserve is situated along on both sides of the Winnipeg river at its mouth, and contains an area of 37.04 square miles. It is covered with heavy timber on the north side of the river, and on the south side along the river bank. The Winnipeg river possesses a characteristic common to many rivers in this country, and that is a high bank receding from the river. Channels have to be cut through the bank to allow the water from the interior swamps to drain into the river. This reserve was subdivided by Mr. Lestock Reid, D.L.S., into ten-chain lots.

Population.—The population of this band according to the last census was 478.

Health and Sanitation.—The people of this reserve were visited heavily during the months of March and April by an epidemic of scarlet fever and measles. The department, however, sent prompt relief, and the medical officer of the department was stationed there for two months until all danger of further contagion had passed. Thirty deaths occurred on the reserve, though all were not treaty Indians. There were twenty cases in the boarding school, but good care and attention brought all the pupils through safely except one, who died of other complications, and all the pupils were at their school work in two weeks. There was of course much distress through destitution, but the department placed the matter in the hands of the medical officer, and none were allowed to suffer for lack of food.

Occupations.—The people of this reserve depend largely upon hunting and fishing as a means of livelihood. There are no settlements at the north of them, and game is more abundant. We were informed that the Hudson's Bay Company last season purchased from the Fort Alexander Indians over \$6,000 worth of fur. This does not represent their total earnings. There are three other traders in the vicinity, all of whom buy fur. There is also a great deal brought in to the fur buyers in Sel-

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kirk and Winnipeg. They occupy themselves during the summer at the fisheries. Fish tugs call there regularly for fish. During the winter of 1905-6 they were given permission by the department to cut and sell ties, from which was realized by the Indians over \$3,000. A few of the Indians go to Lake du Bonnet and work at the lumber mills, or such other employment as they are able to obtain there.

Buildings.—The dwelling-houses are of the usual type, log walls and shingle roofs.

Stock.—The statistics show but very few cattle and horses. Even if they had stock to sell, it would be difficult to get it to market. An effort is being made to encourage them to have sufficient to supply themselves with meat and milk.

Farm Implements.—There are three wagons on this reserve, a few sleighs, mowers and rakes. It is a difficult matter for an Indian to gather sufficient means to purchase a wagon, but wagons and ploughs are his first necessities in any attempt at agriculture. The cost of sleighs is quite within his limit, and as there is a growing demand for the wood on the reserve, should they be permitted to sell it, no doubt in a few years there will be a number of sleighs purchased on that reserve.

Education.—There is a day school on this reserve on one side of the river under the Church of England, and in charge of Miss Spence, who has had her training in one of the industrial schools. It was well attended during the winter until the epidemic broke out in March, when the medical officer closed the school until July 1. There is a good boarding school, conducted under the auspices of the Roman Catholic Church, with an attendance of 45 pupils. The building is in every way modern, being steam-heated, lighted with gas, good plumbing, with water throughout the building. They have a fine garden in connection with the school, in which abundance of all kinds of vegetables is grown and cared for by the pupils. The school is well conducted, and the pupils are clean, alert and making good progress.

Characteristics and Progress.—These Indians are fairly industrious and law-abiding. They have not made much progress in gathering together stock, implements or other evidences of wealth, but there are none of them except a few old people absolutely poor. The reserve appears to be divided into what they themselves designate as the French and the Indians. The members of the French end are more ambitious and industrious, but at the same time are apt to avail themselves of liberties indulged in only by white men.

Temperance and Morality.—These Indians have not had until within the last few years many opportunities to indulge themselves in the use of intoxicants. Of late there has been more communication between the Winnipeg river district and the outside world. Before that they were more isolated. Such communication brings with it the usual difficulty.

Improvements.—Last year the Indians, under the direction of the department, built 6 miles of road through the reserve along the south or west side of the river. It required a clearing through a dense wood fifty feet in width. The trees were all cut even with the ground, thus making safe driving anywhere in the clearing. There were also built twelve bridges with proper approaches. This road was not only a help to the Indians during construction, but is a help to them at all times in their communication with one another. It is also much appreciated by the settlers along the Winnipeg river, who are now enabled to get in and out of their own settlement.

I have, &c.,

J. O. LEWIS.

Indian Agent.

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MANITOBA SUPERINTENDENCY,

NORWAY HOUSE AGENCY,

NORWAY HOUSE, KEEWATIN, July 3, 1906.

FRANK PEDLEY, Esq.,

Deputy Supt. General of Indian Affairs,

Ottawa.

SIR,—I have the honour to submit my annual report for the Norway House agency for the fiscal year ended June 30, 1906, together with inventory of government property in my charge on that date.

The agency now comprises 12 reserves, and they are, for the most part, located along the shores of Lake Winnipeg. Numbered from the south, they are as follows: Black River, Hollowwater River, Bloodvein River, Fisher River, Jackhead River, Berens River, Little Grand Rapids, Pekangikum, Poplar River, Norway House, Cross Lake and Grand Rapids. Of these, Fisher River, Jackhead and Grand Rapids are on the west shore of Lake Winnipeg. Little Grand Rapids and Pekangikum are about 120 and 180 miles, respectively, up the Berens river, on the east shore of the lake. Norway House is about 25 miles down the Nelson river from the north end of Lake Winnipeg, and Cross Lake is about 60 miles further down the same river; all the other reserves are to be found along the east shore of Lake Winnipeg. Grand Rapids reserve, on the west shore of Lake Winnipeg, formerly was attached to the Pas agency, but has been recently added to the Norway House agency.

The population of these reserves at the time of the annuity payments, in 1905, and the area of each reserve, was as follows:—

Black River reserve, population, 62, being just the same as in the previous year; the area of the reserve is 2,000 acres.

Hollowwater reserve, population, 99; the area of the reserve is 3,316 acres.

Bloodvein reserve, population, 57; the area of the reserve is 3,369 acres.

Fisher River reserve, population, 413; area, 9,000 acres.

Jackhead reserve, population, 67; area, 2,860 acres.

Berens River reserve, population, 298; area, 7,400 acres.

Poplar River reserve, population, 149; area of reserve, 3,800 acres.

Norway House reserve, population, 523; the area of the reserve is 10,340 acres.

Cross Lake reserve, population, 335; the area of this reserve is 7,760 acres.

Little Grand Rapids reserve, population, 137; the area of the reserve is 4,920 acres.

Pekangikum reserve, population, 114; the area of the reserve is 2,080 acres.

Grand Rapids reserve, population, 117; area of reserve, 4,646 acres.

Physical Features.—The conditions that obtain on this agency are entirely different from what are found on the western prairies from Winnipeg to the Rocky mountains. The whole country is given up to rock and muskeg; the muskeg being depressions or pockets on the surface of the rock, with no drainage. There is practically no agricultural or ranching land. Indians do not, and never can, make a living off the soil in the sense that this is true of the prairie country to the southwestward. All must live on the water-front, as no wells could be dug inland. Here and there along the shores of lakes and the banks of streams, are small patches of soil from one to six feet deep, on top of the rock, and upon these patches Indians build their homes and have small garden patches, which latter are of great assistance to them. But the Indian of this northern country earns his living almost entirely by hunting, trapping and fishing. A limited number of men find employment at good wages in the lumber camps around Lake Winnipeg. In the past the Indian has had, and even yet has, an easy and comfortable living from the pursuits above mentioned. But the fishing industry has been so industriously prosecuted by the large companies that it is fast

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playing out, and where, in the past, the Indian had only to put in his net in front of his door over night to secure an abundance, he is now unable to get anything, and is finding it most difficult to supply his own table, not to speak of the feeding of his dogs, and these latter are an absolute essential to living in this north land. Were the fur-bearing animals suddenly to become scarce for a period of years—in the light of past history a not improbable event—then there would at once be acute destitution among these people. Viewed from the stand-point of the welfare of the Indian, it seems regrettable that measures cannot be taken for the better protection of these northern waters.

Tribes.—The Swampy Crees and the Saulteaux are the two tribes to which the Indians of this agency belong.

Health and Sanitation.—The general health of the bands comprising the Norway House agency has been good throughout the year. There is perhaps less than the average amount of scrofula found there. Tuberculosis of the lungs is all too prevalent still, although the Indians are beginning to learn how infectious it is and are more careful.

At Black River and Hollowwater there was a slight outbreak of measles and scarlet fever last spring. A few deaths occurred. Dr. Steep was sent out from Winnipeg, and was successful in his treatment.

Occupations.—As has already been stated, these Indians are dependent upon hunting, trapping and fishing as a means of earning a livelihood. A few cattle are kept on most of the reserves, and at Fisher River, the most desirable reserve in the agency, about 300 head of cattle are kept, as well as a number of horses. Adjacent to this reserve there is a considerable quantity of hay-land, and pasturage is good on the reserve, so that their cattle are a great help to the Indians of this reserve.

Buildings.—The class of buildings throughout the agency is very fair. Logs suitable for building purposes are abundant everywhere. Nearly all buildings now erected have from two to three rooms. Houses are well lighted and ventilated, and on most of the reserves only shingle-roofed houses are now being erected.

Education.—A number of children from this agency are educated in the Brandon and St. Paul's industrial schools. At Norway House is a boarding school for the accommodation of 50 pupils, and it is always more than full. In addition there are on all the reserves, except Pegangikum, day schools. I regret not being able to report more favourably on the success of these day schools. In most cases good teachers are provided, and comfortable and well furnished school-houses have been erected. But the necessarily nomadic habits of these hunters and trappers make it very difficult to get anything like regular attendance on the part of the children, who with their mothers must follow the head of the family in his wanderings.

Religion.—At Jackhead, at Bloodvein, at Little Grand Rapids and at Pekangikum, the Indians are still for the most part pagan, and it naturally follows that these are the least progressive bands in the agency. Most of the Indians of all the other reserves are, nominally at least, Christians. The Methodist body has been in occupation here for a great many years, and naturally has a strong following. The Anglicans and the Roman Catholics have also missions on several of the reserves, and have each a goodly number of members and adherents.

Characteristics and Progress.—In pursuit of their calling, these Indians are industrious, and up to the present have made a good living, but it seems entirely foreign to Indian nature to make any provision for the future. Yet they live a simple and for the most part a contented life. Naturally here one does not look for much progress. Hunters and trappers they have always been, and hunters and trappers, and nothing more, they must remain so long as they reside in this region.

Temperance and Morality.—Naturally on most of the reserves comprised in my agency, the Indians are not so exposed to temptation in the matter of intoxicants as are those in more civilized parts, which perhaps fully accounts for the fact that here we have comparatively little trouble from this cause. From a moral standpoint there

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is still considerable room for improvement, although in this respect too we profit by our isolation in the immunity it affords from the contamination of the worst element which always infests centres of civilization.

General.—The conditions that have prevailed throughout the year have on the whole been pleasing. We have been free from any serious sickness, we have enjoyed a fair amount of prosperity, and there has been no destitution, to my knowledge, that has not been relieved. We have been practically free from crime throughout the year, and generally, law and order have prevailed. The presence of Sergeant Smith, of the Royal Northwest Mounted Police, at my headquarters at Norway House, has been of much assistance to me. On these out-posts, where so much depends upon the individual man, and where there can be practically no supervision, the police department is to be congratulated upon having at its disposal such men as Sergeant Smith. I have again to acknowledge gratefully the courtesy and ready assistance extended to me by officials of the Hudson's Bay Company, and also the kind hospitality shown me by the missionaries on the various reserves, during my travels.

All of which is respectfully submitted.

I have, &c.,

NEIL GILMOUR,

Indian Agent.

MANITOBA SUPERINTENDENCY,

PAS AGENCY,

THE PAS, SASK., June 30, 1906.

FRANK PEDLEY, Esq.,

Deputy Supt. General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my annual report of the Pas agency for the year ended June 30, 1906.

GRAND RAPIDS BAND.

Reserve.—The reserve of this band has an area of 4,646 acres, and is situated on the banks of the Saskatchewan river, at the point where it empties into Lake Winnipeg. It contains a considerable amount of soil suitable for cultivation, but hay and timber cover the greater portion.

Population.—The population of this band last August was 117.

Health and Sanitation.—Although there has been no serious disease amongst the Indians of this band, there has been considerable sickness of various kinds, particularly amongst the children and young people. With few exceptions their premises are kept tidy, and they are clean in their habits and housekeeping.

Occupations.—This band has the advantage of obtaining employment at the fisheries on Lake Winnipeg and Cedar lake. Most of them have small gardens, and a few cattle.

Buildings.—There has been a steady improvement in nearly all their dwellings here. Most of their houses have two rooms and an upstairs and many of the roofs are covered with cedar shingles.

Education.—There is a good day school on this reserve. The attendance and progress is better than formerly, nearly all the pupils understand and many of them can converse in English.

Temperance and Morality.—There have been no complaints or even reports of any intemperance or immorality amongst these Indians during the year.

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CHEMAWAWIN BAND.

Reserve.—This band occupies 3,040 acres adjoining Cedar lake. Parts of it are covered with timber, and some seasons considerable quantities of hay could be procured, but the greater part of it is limestone.

Population.—At last treaty payments there were 161 individuals belonging to this band.

Health and Sanitation.—During the past year the health of this band has been fairly good. These Indians are slowly but steadily improving in the art of house-keeping.

Occupations.—Fishing and hunting form the main employment. Only a few have small gardens, and stock-raising is not attempted.

Buildings.—A few years ago there were no buildings here worthy the name of a house, but now there are quite a few comfortable houses, with shingle roofs, and several under construction.

Education.—The day school on this reserve has been fairly well attended during the year, and the progress fairly satisfactory.

Temperance and Morality.—I am not aware of any cases of intemperance or immorality occurring here during the year.

MOOSE LAKE BAND.

Reserve.—At the south end of Moose lake the 145 members of this band occupy 6,342 acres, a considerable portion of which is good arable and hay-land, the remainder is made up of woodland and swamp.

Health and Sanitation.—During the winter months there was a great deal of sickness in this band and quite a number of old people died.

The sanitary regulations are fairly well attended to and there is improvement in their ways of living.

Occupations.—Hunting and fishing are their only means of support here. Only a few cultivate small gardens, and although it is an ideal place for keeping cattle, they have no desire to have any.

Buildings.—Owing to the fact of their living away from the reserve for a good part of the year, they have not paid much attention to their buildings; but lately they have shown signs of a change, and quite a few buildings are in course of construction.

Education.—So far the members of this band have shown but little interest in the education of their children, and with irregular attendance, little progress can be expected.

Temperance and Morality.—Until the last few years, there was no opportunity for this band to acquire intoxicants; but now since the lake has been opened for commercial fishing and a regular traffic carried on to and from the railroad, there is ample opportunity for those who have the means and are so inclined, to get all the liquor they want. The standard of morality, which was never very high in this band, is not likely to improve under these circumstances.

THE PAS BAND.

Reserve.—The 8,128 acres in this reserve are located near the centre of the agency, about one-fifth of which is located on the south and the remainder on the north side of the great Saskatchewan river.

The Hudson's Bay railroad, which is now under construction, crosses the river here and runs right through the reserve. A railway station is located on the south side.

The land is not adapted for extensive farming operations. The small patches that have been cultivated consist of rich alluvial soil and raise good crops. A large portion is wooded and there is an abundance of pasture and hay-land.

The agency headquarters are located within the limits of this reserve.

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Population.—At treaty payments last year this band had a population of 415.

Health and Sanitation.—For many years this band has kept clear of epidemics and contagious diseases. Their houses and persons from a sanitary point of view are steadily improving, but still there is all the year through a certain amount of sickness, upon which remedial and preventive measures seem to have no effect so far as a reduction of the death-rate is concerned.

Occupations.—The principal source from which this band obtains a living is fishing and hunting. Good crops of potatoes are grown every year, and some have a few cattle. Quite a number have gone to work on the railroad this summer, and are getting good wages.

Buildings.—There seems to be a general desire for larger and better buildings. Quite a few have very good houses already, and many others are following the example.

Stock.—This band has not made a success of stock-raising in the past for several reasons, and perhaps the circumstances under which they were situated would have had the same effect on any other community, but now with the advent of the railway, which has done so much to open up other remote parts of the country, we expect that not only the cattle but many other latent industries will be opened up, the inevitable result of which will be a period of growth and prosperity.

Education.—There are two day schools on this reserve, one on the south and the other on the north side of the river. Of late years the parents have taken more interest in the education of their children, and consequently there has been better average attendance and a steadier progress.

Temperance and Morality.—It will to some extent be satisfactory if the sober and moral condition of this band remains as good in future as it has been in the past.

SHOAL LAKE BAND.

Reserve.—At the foot of the Pas mountain this band occupies 2,240 acres, some of which is suitable for cultivation. With a large extent of pasture and hay-land, it is an ideal place for cattle-ranching.

Population.—The band has a population of only 70.

Health and Sanitation.—Since the outbreak of small-pox four years ago, this band has had exceptionally good health. Their houses and premises are always clean when visited.

Occupations.—They raise large crops of potatoes here, and have a few cattle; but hunting is their principal occupation.

Buildings.—The village being surrounded with a belt of spruce timber, they have but little trouble in getting all the building material required. Their houses are well built, comfortable and commodious.

Stock.—This reserve has hay and pasture enough for several hundred head of cattle, but being so isolated and far from an outlet, there has been no inducement to increase the herd beyond their own requirements.

Education.—All the children here attend the day school until they are 9 or 10 years old, when they begin to think they have got all the education necessary, and, being out of reach of civilization, they neither know the benefit nor feel the want of it.

Temperance and Morality.—The members of this band are in no way exposed to the temptation of the liquor habit; and I have not heard of any cases of immorality amongst them.

RED EARTH BAND.

Reserve.—This reserve also lies at the foot of the Pas mountain, on the banks of the Carrot river, about 10 miles further west than Shoal lake. It has an area of 4,769 acres, most of which is well adapted for mixed farming.

Population.—On September 7 last year this band had a population of 123.

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Health and Sanitation.—The general health of this band has been better this last year than for some years past. These people live a good deal in tents, and their principal house-cleaning consists of moving camp.

Occupations.—These Indians have large gardens and raise excellent crops of potatoes, upon which they depend for a living between the hunting seasons.

Stock.—The few cattle which they have on this reserve seem to be more trouble than benefit to them, and until a radical change takes place, very little interest will be taken in stock-raising.

Education.—The day school here has been kept supplied with a teacher for many years, but outside of issuing supplies to the destitute and biscuits to the children that go to school, the Indians have no further use for him, and so long as they remain so isolated and self-willed as they are, very little change may be expected.

Temperance and Morality.—Their isolation has a beneficial effect so far as their good behaviour is concerned. Their conduct in this respect has so far been exemplary.

CUMBERLAND BAND.

Reserve.—This reserve, with its 4,025 acres, extends from the banks of the Saskatchewan river to the shores of Cumberland lake. The land is generally poor, with very little fit for cultivation.

Population.—The population of this band is 165.

Health and Sanitation.—The general health of this band is never very good, and their roving and unsettled habits are not conducive to much improvement.

Occupations.—Hunting, fishing and boating form the chief employments of this band.

Buildings.—The majority of this band spend the most of their time away from the reserve, and very little attention is paid to improvements of any kind. The few that do live permanently on the reserve have comfortable dwellings.

Education.—These Indians do not look on the education of their children as being of any importance, and the few that send their children to school do so to please the ministers of the church or officers of the department more than anything else.

Temperance and Morality.—There are only a few of this band that would go out of their way to get liquor, and their circumstances prohibit them from obtaining much of it. Their moral standing is about on a level with the other communities similarly circumstanced.

PETER BALLENDINE'S BAND.

This band is not located on a reserve, neither have they any permanent place of residence. They are all hunters, and are scattered over a very large extent of country, and from appearances seem to make a better living than most of their brethren to the south.

They meet once a year at Pelican Narrows to receive their annuities.

I have, &c.,

JOSEPH COURTNEY,

Indian Agent.

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MANITOBA SUPERINTENDENCY.
PORTAGE LA PRAIRIE, AND MANITOWAPAH AGENCIES,
PORTAGE LA PRAIRIE, July 16, 1906.

FRANK PEDLEY, Esq.,
Deputy Supt. General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit the annual report of the Portage la Prairie and Manitowapah agencies for the year ended June 30, 1906.

PORTAGE LA PRAIRIE AGENCY.

Treaty No. 1.

Reserves.—This agency comprises five reserves.

Roseau River reserve, situated at the confluence of the Roseau and Red rivers, has an area of about 5,670 acres. The reserve is well adapted for both grain-growing and stock-raising, the soil being rich and plenty of hay being available. Last year a good crop of grain and hay was harvested. This year the crops are looking splendid, and if no untoward circumstances arise should produce an excellent yield. There is enough wood for fuel and timber for small buildings along the streams.

Roseau River Rapids reserve is situated on the Roseau river, about 18 miles from the mouth. Its area is about 2,080 acres. The reserve is well adapted for grain-growing, and there is excellent pasture on the land recently purchased. The grain and hay crops last year were both good, and this year also promise well.

Long Plain reserve is situated on the north side of the Assiniboine river, in township 10, range 8, west of the 1st meridian, about 15 miles southwest of Portage la Prairie. It has an area of 10,816 acres. The reserve contains some good farming land, though some of it is light. Last year a good crop was harvested, and this year the crops also look well. The reserve is well wooded, though the forest is being depleted, and fires last year went through and destroyed considerable timber.

Swan Lake reserve, situated in township 5, range 11, west of the 1st meridian, contains 9,634 acres. It is situated on the north side of Swan lake, in a good grain-producing district, and as both hay and water are available in plenty, the reserve is also well adapted for stock-raising. Last year the crop of grain and hay was good. This year there has been a good deal of rain, which has retarded haying; but if the weather becomes more favourable, a good crop will be secured. The grain crop was slightly frozen in May, but rain coming shortly afterwards, the crop has progressed favourably, and now promises a good yield.

Indian Gardens reserve is situated near the south bank of the Assiniboine river. It comprises section 11, township 9, range 9, west of the 1st meridian, and has an area of 640 acres. The land is first-class for arable purposes, but there is no wood and very little hay. The crop last year was good. This year it appears to be fair, though some of it is very weedy.

Population.—The population of the different bands is as follows: Roseau, including the Rapids, 164; Long Plain, 131; Swan Lake, including Indian Gardens, 94; making a grand total of 389.

Health and Sanitation.—The health of the Indians this year has been good. There have been no epidemics, and they appear to be in about the usual health.

On all the reserves the usual sanitary precautions of cleaning up and burning refuse have been taken. Nearly all the Indians move into tents in the spring, and their migratory habits secure them the benefit of natural sanitation and prevent an

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accumulation of dirt and filth. An improvement in the health of the Indians is always apparent with the advent of these improved conditions each spring.

Occupations.—Both grain-growing and stock-raising to a certain extent are carried on on the Roseau River reserve. The farming operations are not being carried on as systematically and successfully as could be desired. Steady work necessary to successful agriculture appears to be contrary to Indian nature, and their progress has not been so much as the assistance and instruction which they have received would warrant. The Indians can always obtain work from the settlers, and the stated cash return appears to be more attractive to them than the returns which would be obtained by the successful cultivation of their own land. At Roseau Rapids the same condition obtains. Grain-growing is principally carried on here, and unfortunately the crop appears to be very weedy. It is also to be regretted that stock-raising is not carried on here more extensively. The pasture-land is excellent, and there is plenty of hay. There are some good cattle, but the herds are not increasing very fast, though in some individual cases there are very good herds. Failure to breed systematically, and to give careful attention to the stock, is responsible for the slow progress manifested.

At Swan Lake reserve there was a noticeable improvement since my first inspection last year. Both grain-growing and stock-raising are being carried on with considerable success, and with a little more steadiness and systematic work this band could be independent without difficulty.

On the Indian Garden reserve there is no stock, as there is not sufficient hay available. Grain-growing only is carried on, with indifferent success. It might be well if this band were moved to a locality where hay would be available and where stock-raising could be carried on successfully.

On Long Plain reserve, with a few exceptions, little interest is manifested in agriculture, and it is almost impossible to induce the members of this band to attend to their crops properly. There are a few plots which present a very fair appearance, but very few. This is to be regretted, as the band includes plenty of young able-bodied men, and the land is good.

The Indians on all the reserves are generally in fairly comfortable circumstances. They make considerable money from hunting, fishing, picking berries, gathering snake-root, &c., and they can readily obtain work at good wages.

Buildings, Stock and Farm Implements.—With few exceptions, the houses and stables are built of logs, with the old pole and mud roof. The houses have nearly all lumber floors, and shingle roofs are also becoming more numerous. At Swan Lake and Roseau reserves there is quite an improvement apparent.

The cattle are fairly well taken care of, and not as many were lost last year as formerly. With more systematic breeding, the herds would increase much more rapidly. There are some very good herds, but the number is comparatively small. It is noticeable, however, that with the increase of the herd, the interest taken also increases, and it is seldom that those with the largest herds fail to make provision for them, though there is frequently a scarcity with those who have only two or three animals. A large number of calves are lost every year through lack of attention.

Except in a few instances they are well supplied with implements and tools.

Education.—There are two schools in this agency, one at Swan Lake, in charge of Mrs. Kate Cameron, and one at Roseau Rapids, in charge of Miss McMahon. At Swan Lake the attendance is very small and irregular, and the progress not encouraging. At Roseau Rapids the attendance is larger and more regular and satisfactory progress is being made, though slowly.

Characteristics and Progress.—Progress is not very apparent. The Indians appear lacking in initiative and in those qualities necessary to successful individual effort. They will give faithful service to a white farmer, but will not or cannot work steadily and systematically on their own behalf.

Temperance and Morality.—Intemperance and immorality appear to be rampant among the Indians, and are the most deplorable features which have come under my

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observation. Punishment and fines appear to have little deterrent effect, and it is almost impossible to obtain information from the Indians as to their source of supply. A lot of money is squandered in the illicit purchase of liquor. The condition of affairs was particularly bad at Roseau River. A vigorous effort has been made to stamp out the evil and a special officer employed for the purpose.

General Remarks.—The Indians appeared to be in fairly comfortable circumstances, and to have made a very good living during the year. At the annuity payments this year they appeared in much better spirits, more satisfied and contented, and much more cheerful than last year.

PORTAGE LA PRAIRIE SIOUX.

These Indians live within the town limits of Portage la Prairie, on a tract of land about 26 acres in area, purchased and owned by themselves. They have also lot No. 14, of the parish of Portage la Prairie, given them by the Dominion government. They are a superior type of Indian to the others throughout the agency, and physically the adults are large, strong and healthy. Indications of tubercular disease, unfortunately, however, are shown by many of the children. These Indians earn a good living, working for the farmers of the neighbourhood, and have good houses and gardens. While above the average Indian in morality and temperance, these Indians also squander a lot of money in purchasing liquor and paying fines, and the suppression of the illicit traffic appears very difficult, as practically no information can be obtained from the Indians.

The Presbyterian Church is looking after the spiritual welfare of these Indians, and regularly a weekly service is held in the village church.

There is a Sioux boarding school in the town. It has accommodation for about 40 pupils, and there is an average attendance of about 25. The government allows a per capita grant for 25 pupils, and a larger attendance could be obtained if the per capita grant would permit.

The school is conducted by Mr. W. A. Hendry, principal; and his sister, Miss Hendry, is assistant teacher. Mr. Hendry is a most efficient officer, manifests a deep interest in his work, and with the co-operation of his wife and sister, is doing splendid work.

MANITOWAPAH AGENCY.

There are ten reserves in this agency, of which Sandy Bay is in Treaty No. 1, Shoal Lake in No. 4 and the rest in No. 2.

Reserves.—Sandy Bay reserve is situated in township 18, range 9, west of the 1st meridian, on the southwest shore of Lake Manitoba. There is sufficient good land for gardens, and a good supply of hay, but the greater part of the reserve is covered with scrub and bush, and it is not adapted for grain-growing. Its area is 12,160 acres.

Lake Manitoba reserve is situated in township 22, ranges 8 and 9, west of the 1st meridian, on the northeast shore of Lake Manitoba, and has an area of 9,472 acres. This reserve is covered with a heavy growth of brush and timber, and is also much broken by the arms of the lake. It is not suited for agriculture, though there is enough good land for gardens and a good supply of hay.

Ebb and Flow Lake reserve is situated in townships 23 and 24, ranges 11 and 12, west of the 1st meridian, on the west shore of Ebb and Flow lake. It is not suitable for farming, but has a good supply of hay, and has plenty of timber. It has an area of 10,816 acres.

Fairford reserve is situated in townships 30 and 31, range 9, west of the 1st meridian, on the Fairford river. It is well supplied with good timber and hay, and has plenty of good land for gardens. It is not, however, suitable for grain-growing, which has never been attended here with much success.

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Little Saskatchewan reserve is situated in township 31, range 8, west of the 1st meridian, on the west shore of Lake St. Martin, and contains 3,200 acres. It has a good supply of hay and wood, but is not adapted for farming.

Lake St. Martin reserve is situated in township 32, ranges 7 and 8, west of the 1st meridian, on the north end of Lake St. Martin, and has an area of 4,032 acres. The reserve is not adapted for farming, but has a fair supply of hay, and is well wooded.

Crane River reserve is situated in township 29, range 13, west of the 1st meridian, on the east side of Crane river, and has an area of 7,936 acres. A strip across the river, with good hay meadows, has also been reserved for the band, as the reserve proper contains very little hay-land. The reserve proper contains sufficient good land for gardens, and has a quantity of good spruce timber.

Waterhen reserve is situated in township 34, range 13, west of the 1st meridian, on the south end of Waterhen lake, and contains 4,608 acres. The land is not suited for farming, though there is a good supply of hay and timber.

Pine Creek reserve is situated in township 35, ranges 19 and 20, west of the 1st meridian, on the west shore of Lake Winnipegosis. Its area is about 12,000 acres. It is not adapted for farming, but is well supplied with hay and timber.

Shoal River reserve comprises four small reserves, near the mouth of Shoal river, situated on the south end of Dawson bay, on Lake Winnipegosis, and one small reserve on Swan lake. Altogether they have an aggregate area of about 5,500 acres. They are well wooded with poplar and some spruce; have sufficient hay-land, but are not adapted for farming.

Population.—The population of the agency is 1,379.

Health and Sanitation.—The health of the Indians during the year has generally been about as usual. The usual coughs, colds, scrofula and consumption were apparent on all the reserves, but not more so than ordinarily. On the Crane River reserve there was an epidemic of measles during the spring, and a number of deaths occurred.

The refuse and rubbish were cleaned up and burned as usual in the spring. Nearly all the Indians move into tents in the spring, and as they move from place to place, an accumulation of dirt and filth is avoided, and natural sanitation obtained.

Occupations.—Stock-raising is the only civilized occupation open to the Indians on these reserves, as they are not adapted for farming. Some of the herds are increasing, but the general progress has not been rapid. A more systematic method of breeding must be followed by the Indians before any degree of success can be obtained. It is noticeable here as elsewhere that those who have the largest herds take a greater degree of pride in their stock than the owners of a few animals, and make proportionately better provision for them. A large number of calves are lost each year through inattention and carelessness, and last year at Crane River a number of cattle took sick and died.

The Indians earn considerable money during the winter in the lumber camps and cutting rails, and in the summer by picking berries, digging senega-root, and in the fall good wages can be obtained by working in the harvest-fields. At Fairford plenty of work at good wages could be obtained in the gypsum mine and mill, but the mill has recently been destroyed by fire, and this source of revenue has been cut off, temporarily at least. There is plenty of fish and game, and there is no need for the Indians to suffer want.

Buildings and Stock.—All the buildings are of logs. Nearly all have wooden floors, and some have shingle roofs.

The stables simply have log walls, with poles and hay roofs. They are mudded and plastered in the fall, and fulfil their requirements in the winter excellently.

The cattle generally came through the winter well, and in no unfavourable comparison with those of the white settlers. At Crane river a number of cattle took sick and died.

Education.—There are day schools on each reserve, except Crane River, and two at Fairford. The children do not show much progress, as their attendance is very irregu-

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lar, owing to the migratory habits of their parents. There is a large stone boarding school adjoining the Pine Creek reserve, owned and conducted by the Roman Catholic Church, with a staff of professional teachers of the Order of the Reverend Franciscan Sisters. The department allows this school a per capita grant for 55 boarding pupils and 15 day scholars. The school has the full number of the grant and a number of extra boarding pupils supported by the institution. In connection with the school, there is also a saw-mill and blacksmith-shop. The school fully deserves the assistance it receives and is doing excellent work. Pupils receive more benefit in one year in such an institution than they would probably receive during their whole childhood in their attendance at the day schools.

Another large new school has been built by the Roman Catholic Church at Sandy Bay, and has been in operation since about August 1, 1905. The school has three stories and basement, is equipped with hot and cold water, acetylene gas and other modern features. It has accommodation for 50 pupils, and there have been about 40 in attendance. This school is also doing splendid work and merits the government assistance that it is receiving.

Progress.—The Indians do not show much progress. They appear contented to eke out an easy living from hunting and fishing, and so long as it can be obtained, with a few odd days of labour, their advancement in civilized pursuits is likely to be slow.

Temperance and Morality.—There is a great deal of intemperance among the Indians and much immorality. It is exceedingly difficult to suppress either of these evils, as the Indians will seldom give any information as to whom they received their liquor from. It is generally considered that the half-breeds are most frequently the source of supply. In dealing with cases of immorality, one of the greatest difficulties to contend against is the opposition of the parents, from whom assistance would naturally be expected.

General Remarks.—The Indians appeared to be in fairly good health, were well clothed and apparently fairly comfortable and contented. The condition of their houses, stables, gardens and cattle was also fairly satisfactory.

I wish to acknowledge, with thanks, the courteous and generous assistance rendered me by the day school teachers on all the reserves.

I have, &c.,

R. LOGAN.

Indian Agent.

MANITOBA SUPERINTENDENCY,
RAINY RIVER DISTRICT—FORT FRANCES AGENCY,
FORT FRANCES, ONT., July 30, 1906.

FRANK PEDLEY, Esq.,
Deputy Supt. General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my annual report for the year ended June 30, 1906, together with statistical statement and inventory of government property in my charge.

Agency.—The agency buildings are situated at the mouth of Rainy lake, on what is known as Pither's Point, about 3 miles east of Fort Frances, and the agency comprises the following bands, viz.: Hungry Hall, Nos. 1 and 2; Long Sault, Nos. 1 and 2; Manitou Rapids, Nos. 1 and 2; Little Forks, Couchiching, Sturgeon Lake, Niacat-chewenin, Nickickousemenecaning, Seine River, Lac la Croix and Sturgeon Lake, being 14 in all.

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HUNGRY HALL BANDS, NOS. 1 AND 2.

Reserves.—These reserves, Nos. 14 and 15, are situated at the mouth of Rainy river, and contain 6,280 acres. The timber on these reserves has deteriorated in the past few years, owing to fires and other causes, there being large quantities of dead tamarack, which is only fit for fire-wood. The land is a rich clay loam.

Population.—The population of these two bands is 50.

Health and Sanitation.—The general health of all the bands in this agency has been good. All the Indians have been vaccinated.

Occupations.—These Indians work at taking out timber and dry cord-wood in the winter, and for settlers and saw-mills in the summer, besides fishing and hunting.

Education.—There is no school in operation on these reserves.

Temperance.—These Indians are addicted to the use of intoxicants, which they have no difficulty in purchasing on the American side, and which is a great drawback to them and all the other bands along the border.

LONG SAULT RAPIDS BANDS, NOS. 1 AND 2.

Reserves.—These reserves, Nos. 12 and 13, are situated on the north bank of Rainy river, opposite the rapids of that name. Their combined area is 11,413 acres. The land is a rich clay loam, and is well adapted for stock-raising and farming.

Population.—The population of these two bands is 75.

Occupations.—These Indians work at taking out timber and cord-wood, work in saw-mills, steamboats and clearing land for settlers.

Education.—There is a very good day school here under the auspices of the Church of England. The attendance has been fairly regular, and fair progress made.

Temperance.—I regret to state that all the Indians along the Rainy river are very much addicted to the use of intoxicants, which they can easily procure on the American side.

MANITOU RAPIDS BANDS, NOS. 1 AND 2.

Reserve.—These bands occupy reserve No. 11, which is situated on the north bank of Rainy river, opposite the rapids of that name. The area is 5,736 acres. The land is a rich clay loam, and is well adapted for farming and stock-raising.

Population.—The population of these bands is 105.

Occupations.—These Indians work at taking out timber and dry cord-wood, and in lumber camps in the winter, and for settlers and saw-mills in the summer, besides fishing and hunting.

Stock.—This is the only band in this agency that shows any desire to raise stock.

Education.—The day school on this reserve has been closed on account of the poor attendance.

LITTLE FORKS BAND.

Reserve.—The reserve of this band is situated on the north bank of Rainy river, 12 miles west of Fort Frances, and opposite the mouth of the Little Fork river, and is designated as reserve No. 10. It contains an area of 1,920 acres. The land is a rich clay loam.

Population.—The population of this band is 48.

Occupations.—These Indians work at taking out timber, working in lumber camps and for settlers; also fishing and hunting.

WILD LAND RESERVE, No. 15M.

Reserve.—This reserve consists of 24,358 acres, and is owned in common by all the above-mentioned Rainy river bands.

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It adjoins the Hungry Hall reserves near the mouth of Rainy river. This reserve is well timbered with pine, spruce, tamarack, cedar and poplar. The land is a rich clay loam.

COUCHICHIING BAND.

Reserves.—The reserves of this band are situated on Rainy lake and Stangecom-ing bay, 3 miles north of Fort Frances, and are designated as 16A, 16D and 18B.

They contain an area of 15,947 acres. There is considerable good land, but the greater portion is rocky and broken. There is very little merchantable timber on these reserves, owing to frequent fires in the past having destroyed the best of the timber.

Population.—This band has a population of 142.

Occupations.—The resources of this band are many, consisting of working on steamboats, in lumber camps, for settlers, river-driving, cutting and hauling cord-wood, fishing and hunting. A number of the Indian women get considerable work at washing and scrubbing at Fort Frances.

Buildings.—The houses are well built, and very comfortably furnished, and all are kept clean and neat.

The greater portion of this band are treaty half-breeds, and members of the Roman Catholic Church.

Education.—The new boarding school was opened on April 1 last, and has an attendance of 33 pupils. I expect a number of new pupils from the Rainy lake bands will be admitted to this school during the present quarter, as there is accommodation in this school for 60 pupils. The building is an excellent one, is heated by steam, and has all the latest modern improvements in the way of lavatories and closets. It is lighted by acetylene gas, which is stored in the engine-house, which is at a distance from the school. There are three large water-tanks in the top of the building, which are kept full of water, and pipes from these tanks running through the building, with attachments on each floor to attach rubber hose in case of fire. The fire-escape at each end of the building is the best I have yet seen. The staff consists of the principal, the Rev. Father Brassard, and three reverend sisters.

Temperance.—On the whole this band is a fairly temperate and moral people.

STANGECOMING BAND.

Reserve.—This reserve, No. 18C, is situated on Rainy lake about 8 miles north of Fort Frances, and contains 3,861 acres, the greater portion being barren rock, and the timber is of poor quality.

Population.—The population of this band is 47.

Occupations.—These Indians live principally by working in lumber camps and saw-mills, and by fishing and hunting.

Education.—The children of this band will attend the Fort Frances Roman Catholic boarding school.

NIACATCHEWENIN BAND.

Reserves.—The reserves attached to this band are 17A and 17B, and are situated about 26 miles northwest of Fort Frances, on the Northwest bay, in Rainy lake. The area of these reserves is 6,201 acres. The greater portion is rocky and broken. There is some good timber, especially on 17B.

Population.—The population of the band is 61.

Occupations.—The young men get employment in lumber camps and saw-mills, but they principally live by fishing and hunting.

Education.—The children of this band will be sent to the Fort Frances boarding school.

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NICKICKOUSEMENECANING BAND.

Reserves.—This band owns 26A on Red Gut bay, 26B on Porter's inlet, and 26C on Sand Island river, on Rainy lake. The combined area is 10,227 acres, a considerable portion of which is heavily timbered; but the greater portion of the land is rocky and broken. The department sold the pine, cedar and tamarack on reserves 26A and 26B, to the Rainy River Lumber Company, which took out last winter over eight million feet.

Population.—The population of this band is 42.

Education.—There are three boys from this band attending the industrial school at Elkhorn; the other children will be sent to the Fort Frances boarding school.

SEINE RIVER BAND.

Reserves.—This band has two reserves: No. 23A, extending from Wild Potato lake to Sturgeon falls, on Seine river; No. 23B is at the mouth of the Seine river.

They contain a combined area of 11,063 acres. There is considerable good timber on these reserves, but the land is sandy and rocky.

Population.—This band has a population of 129.

Occupations.—These Indians live principally by hunting and fishing.

Education.—There is a day school at Wild Potato lake, the teacher, Mr. Peter Spence, is a treaty Indian. The attendance has been good, and excellent progress made by the pupils.

LAC LA CROIX BAND.

Reserve.—The reserve, No. 25D, belonging to this band, is situated on Lac la Croix, near the boundary, and contains 15,353 acres. There is considerable good timber on this reserve, but the land is poor.

Population.—The population of this band is 115.

Occupations.—The principal occupations of these Indians are trapping, hunting and fishing.

Education.—There is no school on this reserve.

STURGEON LAKE BAND.

Reserve.—The reserve allotted to this band is situated on Kawawagamak lake, and contains an area of 5,948 acres.

Population.—The population of this band is 30.

Occupations.—These Indians depend entirely upon hunting and fishing for their subsistence.

I have, &c.,

JNO. P. WRIGHT,

Indian Agent.

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MANITOBA SUPERINTENDENCY,
RAINY RIVER DISTRICT—KENORA AND SAVANNE AGENCIES.
KENORA, ONT., July 7, 1906.

FRANK PEDLEY, Esq.,
Deputy Supt. General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my annual report for the year ended June 30, 1906.

RAT PORTAGE AGENCY.

This agency comprises the following bands, viz.: The Dalles, Rat Portage, Shoal Lake, Nos. 39 and 40; Northwest Angle, Nos. 33, 34 and 37; Buffalo Bay, Big Island, Assabaska, Whitefish Bay, and Islington; a total of 12 in all.

RAT PORTAGE BAND.

Reserves.—The reserves of this band are 35A and B, situated on Clearwater bay and Matheson's bay, Lake of the Woods, area 13,280 acres; these reserves are fairly well timbered with jack pine, spruce and tamarack.

Population.—The population of the band is 71.

Health and Sanitation.—The health of the band has been fairly good, and all the Indians have been vaccinated.

Occupations.—These Indians take out cord-wood, work for the lumber camps, hunt, fish and pick wild rice as well as berries, and in this way they make a good living.

Buildings.—Their buildings are of an inferior kind, but are kept clean and well ventilated, and are comfortable.

Education.—There is no day school on this reserve, but a number of the children are at the boarding school at Kenora and Shoal Lake.

Temperance and Morality.—The majority of these Indians are addicted to the use of intoxicants, but on the whole they are moral and law-abiding.

THE DALLES BAND.

Reserve.—This reserve is situated on the Winnipeg river, about 10 miles north of the town of Kenora; area, 890 acres; well timbered with spruce, poplar, jack and Norway pine, and there is a number of small hay meadows on the reserve, but of no great extent.

Population.—The population of the band is 61.

Health and Sanitation.—The health of the band has been fair during the year, only 3 deaths having occurred, consumption and scrofula being the cause. All the Indians have been vaccinated, and sanitary measures well carried out.

Occupations.—The principal occupations of this band are hunting, fishing, berry and wild rice picking, working in the lumber camps and for the railroad companies, and a few of them have nice gardens.

Buildings.—Their houses are of logs, small but comfortable, and kept clean and neat.

Education.—There is no school on this reserve, but some of the children attend the Kenora and Cecilia Jeffrey boarding schools.

Temperance and Morality.—The Indians of this band are fairly temperate, and their morals have improved, and now can be placed on a par with any of the other bands.

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SHOAL LAKE BANDS, NOS. 30 AND 31.

Reserves.—The reserves of these bands are on the west and northwest shore of Shoal lake and partly in the province of Manitoba; area, 16,205 acres. They are timbered with spruce, cedar and poplar, with a considerable amount of good agricultural land.

Population.—The population of the two bands is 134.

Health and Sanitation.—Sanitary measures have been well attended to, and the health of the bands has been fair during the year. All the Indians have been vaccinated.

Occupations.—Hunting, fishing, berry and wild rice picking, working for the fish companies and lumber camps are the principal occupations of the band, while some of them have very nice gardens, with good results.

Education.—Most of the children of these bands attend the Cecilia Jeffrey boarding school, which is on the border of the reserve.

Temperance and Morality.—The majority of these Indians will make use of intoxicants whenever they can possibly procure them, but on the whole they are fairly temperate and moral; thanks to the influence of the boarding school and its staff. They are civil and law-abiding.

NORTHWEST ANGLE BANDS, NOS. 33, 34 AND 37.

Reserves.—These bands hold reserves 33A and 34B on Whitefish bay; 33B, 34C, 37B and 37C at Northwest Angle, part in Manitoba and part in Ontario; 34 and 34C on Lake of the Woods; 37A and 34B on Shoal lake; 37 on Big island, and 37 on Rainy river. The combined area is 20,983 acres. On all the reserves there is a quantity of good timber.

Population.—The combined population is 133.

Health and Sanitation.—There has been no epidemic in any of the bands. Consumption and scrofula have carried off some 8 persons; otherwise the health of the bands has been good. All the Indians have been vaccinated.

Occupations.—The chief occupation of these Indians is working for the fishermen and lumber camps, hunting, berry and wild rice picking, with a small amount of gardening.

Education.—All these Indians are pagans, and there is no school on the reserve, but a few of the children attend the boarding schools at Kenora and Shoal Lake.

Temperance and Morality.—Taking these Indians as a whole, they are fairly moral, and while some of them will make use of intoxicants, yet they may be considered temperate. They are civil, and observe the laws of the land fairly well.

BUFFALO BAY BAND.

Reserve.—This reserve is situated on Buffalo bay, Lake of the Woods, in the province of Manitoba; area, 5,763 acres. It is fairly well timbered with different kinds of wood, interspersed with hay swamps.

Population.—This band has a population of 26.

Health and Sanitation.—The health of this band has been very good during the year. There have only been two bad cases of sickness on the reserve, both resulting fatally, the cause being consumption and heart failure. Sanitary measures have been well carried out, and all the Indians have been vaccinated.

Occupations.—Working for the fishery companies, lumber camps, and on steamboats, hunting, wild rice and berry picking, and a small amount of gardening, are the extent of their occupations.

Buildings.—Their buildings are of logs and of a fairly good class, small, but neat and clean.

Education.—These Indians are all pagans, and object to any form of education; consequently there is no school on this reserve.

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Temperance and Morality.—The morals of the band are fair, while the majority of the Indians will make use of liquor whenever they can in any way procure it, which they can very easily do from across the line, at Warroad, on the American side.

BIG ISLAND BAND.

Reserves.—This band holds the following reserves: 31A, 31B, 31C, D, E, F, G and H, on Nangashing bay and Big island, Lake of the Woods. The combined area is 8,737 acres, all fairly well timbered with merchantable timber.

Population.—The population of this band is 157.

Health and Sanitation.—The health of the band has been fairly good, no epidemic has visited this reserve. There are a few cases of consumption and scrofula existing in this band, for which nothing can be done. Sanitary measures have been carried out, and all the Indians vaccinated.

Occupations.—These Indians do a small amount of gardening, fish, hunt, and pick berries, and some of the men work for the lumber camps, and on steamboats during the summer season.

Buildings.—One very good building has been put up and well finished during the year, and their houses are of a good class and clean and neat.

Education.—There is no school on this reserve; as the Indians are all pagans, they object to education.

Temperance and Morality.—The morals of this band are, I am pleased to say, fairly good; the majority of the men will make use of liquor if it comes in their way, but on the whole I think there is an improvement compared with the past two years.

ASSABASKA BAND.

Reserves.—This band holds the following reserves: 35A, 35B, 35C, D, E, F, G, H and J, on Nangashing bay, Obabikong bay, Big and Little Grassy rivers, Lake of the Woods. The combined area is 21,241 acres, well wooded with good merchantable timber.

Population.—The population of this band is 153.

Health and Sanitation.—The health of the band has been fair; no epidemic has visited the band. All the Indians were vaccinated at the last annuity payments. Sanitary precautions have been well carried out, all rubbish has been raked up and burnt or taken away.

Occupations.—Hunting and fishing and berry and wild rice picking are the principal occupations of the band, while a few of them put in gardens and patches of potatoes.

Buildings.—These are of logs; they are small, but fairly clean and comfortable.

Education.—There was a day school on this reserve up to June 30, 1905; since which time it has been closed. A number of the children have gone to the boarding schools at Shoal Lake and Kenora.

Temperance and Morality.—While a number of the Indians make use of liquor when they can get it, yet I find an improvement compared with last year: and the morals of the band are fair to good.

WHITEFISH BAY BAND.

Reserves.—This band has three reserves: 32A, B and C, on Yellow Girl and Sabaskong bay, Lake of the Woods; the combined area is 10,599 acres, interspersed with good merchantable timber, and hay swamps.

Population.—The population of this band is 49.

Health and Sanitation.—The general health of the band has been fair. There are a few bad cases of scrofula and consumption amongst these Indians, for which nothing can be done. They are attended by the medical officer when required.

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Occupations.—A few of these Indians put in small patches of potatoes and gardens. One Indian, Robert J. Roy, has quite a nice field of oats and potatoes, as well as a nice garden. The general occupations of the band are fishing, hunting, berry and wild rice picking.

Buildings.—These are of logs, and of a fairly good size and well built, kept clean and neat.

Education.—There is no day school on this reserve, but a number of the children are at the boarding schools.

Temperance and Morality.—The majority of this band are very fond of liquor, and will do anything to obtain it. Generally speaking, they are moral and law-abiding.

ISLINGTON BAND.

Reserves.—This band holds three reserves: Islington, Swan Lake, and One Man's Lake: the combined area is 24,899 acres. These reserves are well timbered with poplar, jack pine, spruce and tamarack, interspersed with hay meadows.

Population.—The population of this band is 200.

Health and Sanitation.—There has not been any epidemic on this reserve, but a number of the Indians have been sick with grippe and bad colds, and there are a number of cases of consumption and scrofula amongst these Indians, for which there cannot be much done, although they are well attended to and supplied with medicines.

Occupations.—The majority of this band are working for the survey parties, and for the railroad, while the rest are employed in fishing, hunting and berry-picking. Several of the band have nice gardens, and patches of potatoes and turnips.

Buildings.—There is a lot of very nice houses on this reserve. I may mention one, that of Fred Cameron, who has a fine house, with shingled roof, good doors and windows, and painted outside and inside, presenting a nice and clean situation on approaching the reserve.

Education.—There is a day school on this reserve, under the auspices of the Church of England, and a fair average attendance.

Temperance and Morality.—Generally speaking, these Indians are moral; but the majority of the band are much given to the use of liquor to excess. On the whole they are civil and law-abiding.

GENERAL REMARKS.

The Indians of this agency are making a good living by hunting, fishing, and during the berry-time they make a large amount of money by the sale of berries, but very often spend their money foolishly. Still I find a big improvement since last summer.

SAVANNE AGENCY.

This agency is composed of the following bands, viz.: Eagle Lake, Wabigoon, Lac des Mille Lacs, Lac Seul, Wabuskang and Grassy Narrows bands.

EAGLE LAKE BAND.

Reserve.—This reserve is situated on the east side of Eagle lake; area, 8,882 acres. Part of this reserve is suitable for cultivation, and there is a small quantity of hay on it, but very little timber.

Population.—The population of this band is 64.

Health and Sanitation.—The health of the band has on the whole been fairly good. No epidemic has visited the band during the year. Sanitary measures have been well observed, and all Indians have been vaccinated, except children that have been born since last annuity payments.

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Occupations.—Several of these Indians have nice gardens, and a number of them work in the lumber camps. Their chief occupations are hunting and fishing.

Buildings.—These are of logs, fairly well finished, neat and clean.

Education.—There is a day school on this reserve, under the auspices of the Church of England, with a fair attendance, and good progress is being made.

Temperance and Morality.—I regret to say that this band is anything but temperate. The councillor, Big Joe, had to be deposed for intemperance during the year, and many others of the band are just as bad. Their morality is on a par with the other bands.

WABIGOON BAND.

Reserve.—This reserve is situated on Little Wabigoon lake; area, 12,872 acres, well timbered with spruce and poplar.

Population.—The population of this band is 96.

Health and Sanitation.—The health of the band has on the whole been fairly good. There are a number of old cases of consumption and scrofula still existing on the reserve, for which but little can be done; but they are well attended to both as to medicine and food, and all the Indians have been vaccinated, except the children born since the last annuity payments.

Occupations.—Hunting, fishing, and picking berries and wild rice are the principal occupations of the band, while a few of the Indians work in the lumber camps, and during the summer months on the steamboats on the lake.

Buildings.—These are of a poor class; small, but neat, clean and tidy.

Education.—There is a day school on this reserve, under the auspices of the Church of England, with a good average attendance. Mr. J. S. Newton is teacher.

Temperance and Morality.—No complaints have been made as to their morals, and I am of opinion that they will compare favourably with any of the other bands; but a number of them are very much addicted to the use of liquor when they can procure it in any possible way.

LAC DES MILLE LACS BAND.

Reserves.—The reserves of this band are 22A 1 on Lac des Mille Lacs and 22A 2 on Seine river. Their combined area is 12,227 acres.

Population.—The population of this band is 72.

Health and Sanitation.—The health of the band has been good during the year, with the exception of a few cases of old standing, for which but little can be done.

Occupations.—Working in the lumber camps, saw-mills and on steamboats during the summer months, and hunting, fishing and berry-picking are the principal occupations of the band.

Buildings.—These are of logs, of fairly good size, comfortable, clean and fairly well furnished.

Education.—There is no school on this reserve. As the Indians are all pagans, they are opposed to any form of education.

Temperance and Morality.—No complaints have been made as to their morals, and from what I can learn they have a fairly good name, and are civil and law-abiding, but will not refuse to make use of liquor when it is given to them; but on the whole they compare favourably with any of the other bands.

LAC SEUL BAND.

Reserves.—This reserve is situated on the southeast shore of Lac Seul or Lonely lake. A fragment of this band, known as Frenchman's Head, is situated about 15 miles south, on the same reserve. There is another fragment of this band located on Sawbill lake, 4 miles north of Ignace station, who have been ordered to return to their reserve, but so far have not done so. The Lac Seul reserve has an area of 49,000

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acres, the greater portion of which is well timbered with tamarack, spruce and other kinds of timber; while a portion of the reserve is well adapted for cultivation and mixed farming.

Population.—The population of this band is 562.

Health and Sanitation.—The health of the band has on the whole been fair, no serious epidemic having occurred in the band, but they have had some kind of an itch amongst them for quite a while, but it has now disappeared and they are all well now. Sanitary measures have been fairly well carried out, all refuse having been raked up and burnt or carted away, and all Indians have been vaccinated except young children.

Occupations.—The chief occupations of these Indians are fishing, hunting, working for the Hudson's Bay Company, and acting as guides and canoe men for travellers.

Buildings.—Their houses are of logs, of fairly good size. Some of them are shingled, fairly well furnished, clean and comfortable.

Education.—There is a school at Frenchman's Head, with a good attendance, and fair progress is being made.

Temperance and Morality.—The majority of these Indians will indulge in the use of intoxicants if they come in their way, but on the whole they may be counted fairly temperate. Their moral character is as good as might be expected from the mode of life they live, and a noticeable improvement has taken place during the year.

WABUSKANG BAND.

Reserve.—This reserve is situated on the Wabuskang lake; area, 8,042 acres, fairly well timbered with poplar, jack pine and other species of wood, interspersed with hay swamps.

Population.—The population of this band is 49.

Health and Sanitation.—The health of this band has been good. All the Indians have been vaccinated, and sanitary measures have been carried out satisfactorily.

Occupations.—Berry and wild rice picking, hunting and fishing, are the chief occupations of the band, and a few of them have small gardens.

Education.—There is no day school on this reserve, as it was found impossible to get an average attendance.

Temperance and Morality.—A slight improvement has taken place in the mode of living of these Indians since last year. They are more provident and temperate than heretofore, and, from what I can learn, they are also more moral than they have been for the past few years.

GRASSY NARROWS BAND.

Reserve.—This reserve is situated on English river; area, 10,244 acres. There is considerable timber on this reserve as well as some good hay swamps.

Population.—The population of this band is 117.

Health and Sanitation.—Sanitary precautions have been carried out, and all Indians vaccinated. No kind of disease of a serious nature has visited them during the year.

Occupations.—Several of these Indians work for the Grand Trunk Pacific survey parties, and some on the Canadian Pacific railway, while others are working for the Hudson's Bay Company, and some hunt, fish and pick berries and wild rice; and a few of them have very good gardens.

Buildings.—These are all of logs, and of an inferior class, but kept clean and comfortable.

Education.—There is no school on this reserve, as we were unable to get an average attendance. Some of the children are at the boarding schools.

Temperance and Morality.—The majority of this band are temperate, while a portion of them are not so when they can by any means get liquor. They are civil and law-abiding, and in a manner moral.

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GENERAL REMARKS.

While making the annuity payments, I made as far as I possibly could an inspection of all the Indian houses, schools, and their fields, and found that a slight mark of progress could be noticed; but there is room for more.

Taking the two agencies as a whole, the conditions are satisfactory. The only drawback I have is the amount of liquor that is supplied to these Indians by unscrupulous white men. If this could be put a stop to, the Indians would soon be in a much better condition than they are at the present time.

I have, &c.,

R. S. MCKENZIE,

Indian Agent.

MANITOBA SUPERINTENDENCY,

LAKE MANITOBA INSPECTORATE,

PORTAGE LA PRAIRIE, June 30, 1906.

FRANK PEDLEY, Esq.,

Deputy Supt. General of Indian Affairs,
Ottawa.

SIR,—I have the honour to present my ninth annual report upon Indian affairs in this inspectorate. As my last report was brought down to September 30 last, and as I have not since inspected two of the northern agencies, this report will not be as replete as usual.

The inspectorate includes four agencies, namely: Portage la Prairie, Birtle, Manitowapah and the Pas, with a total population at the last annuity payments of 3,817 annuitant Indians and 567 Sioux. The three agencies named first are in the province of Manitoba. The reserves of the Pas agency are in the Northwest Territories, on the lower Saskatchewan river and tributary waters.

PORTAGE LA PRAIRIE AGENCY.

In this agency there are five reserves, viz.: Long Plain, Indian Gardens, Swan Lake, Roseau and Roseau Rapids; also a band of Sioux living on land of their own at Portage la Prairie.

The spring months have been favourable for seeding operations, and a larger area has been put under crop than usual. Up to the present time conditions continue good, and the prospects are bright for a bountiful harvest.

The Swan Lake band under Farm Instructor Campbell, is making considerable progress; also the small band at Indian Gardens. The high wages now prevailing in this province are not conducive for Indians to remain on their reserves and cultivate the land. They think they can earn more money and have an easier time outside. The Roseau bands are a hard proposition. A few of them are trying to advance, but the majority are incorrigible. The Long Plain band is not much better; but, as these Indians are convenient to the agency office, they are under more restraint. Except the sick and aged, all are making a comfortable living, but spend their earnings as fast as they are made. The lands of all the bands of the agency are now valuable, and for all the farming they are doing, or are likely to do, they would be as well on one reserve, perhaps better, as they would be under closer supervision and much better attention could be given them in every respect. After nine years' experience with the degenerate Saulteaux Indians of this agency, I have come to the conclusion that some other method of management will have to be adopted, before a real and perma-

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ment improvement of their condition will take place. The great trouble is, that they are quite satisfied with their present condition, and have no desire for anything better.

BIRTLE AGENCY.

In this agency there are eight reserves, four Saulteaux and four Sioux. The Saulteaux reserves are: Rolling River, Riding Mountain, Waywayseecappo's and Gambler's. The Sioux reserves are: Birdtail Creek, Oak River, Oak Lake and Turtle Mountain. I am pleased to report that the Indians of this agency are making considerable progress, especially the Sioux. Many of these are now quite extensive farmers, and are a credit and benefit to the communities in which they live. As an instance of their advancement, I mention the band at Oak River. In 1890 they had 1,081 acres under cultivation, producing 14,519 bushels of wheat and oats. Last year they had 2,043 acres, producing 30,528 bushels of wheat and 9,156 bushels of oats.

Farm Instructor Yeomans has been directly in charge of this band for a number of years, and much credit is due to him for the results shown. The other Sioux lands, with the exception of the one at Turtle Mountain, are also doing well. They are almost entirely self-supporting. The Birdtail band is located about 14 miles southwest of Birtle and is in close touch with the agency headquarters. The soil here is rather light for wheat, but despite of this a considerable quantity is grown. The soil is better adapted for Indian corn. This grain is now grown quite extensively.

The Oak Lake band is visited occasionally by Farmer Yeomans, and the farming operations of these Indians are directed by him. They are a self-reliant, hard-working band, and are doing well. The Indians of the Turtle Mountain band are mostly wanderers. Their reserve consists of 640 acres. They would do better if removed and placed with the other bands.

The Saulteaux bands are also showing improvement, and are gradually adopting the white man's methods. All the bands have cattle, and are beginning to see the benefits of this branch of industry. I am pleased to report that all the bands of this agency, except a few renegade Sioux at Turtle Mountain and Oak River, are well-behaved and respectable. From reports I have received, there has not been so much drinking the past year as formerly. Missionaries of the Presbyterian and Anglican Churches are labouring among them, with excellent results. The agent and farm instructor are also zealous in liquor prosecutions. In short, the agency is under close supervision both by officials and missionaries, and the result is encouraging and gratifying. The Indians of this agency may be designated as farmers, while a few of them still make their living by hunting and fishing. By far the larger number are following the white man's pursuits.

MANITOWAPAH AGENCY.

There are ten reserves in this agency. Seven are situated on Lake Manitoba or contiguous waters, and three on Lake Winnipegosis. All are Ojibways, except a few Wood Crees at Shoal River reserve. Nearly all have more or less white blood, there being very few pure Indians left. They may be designated as Lake and Wood Indians, making most of their living by hunting and fishing. All the bands have good gardens, but the reserves are not adapted for grain culture, as they are low and swampy and in most cases heavily timbered. The low water in the lakes and rivers the past two seasons has had the effect of improving the hay-lands; this commodity is now plentiful on all reserves. Each band has a considerable herd of cattle, and while they do not thrive as well as on the plains, they are of considerable benefit to the Indians. I may report that as a whole the bands are making considerable progress considering their opportunities. There is little else for them than following the Indian mode of life. A few are engaged at the gypsum works on Lake Manitoba, and in lumbering operations. The past winter was favourable for those engaged in

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fishing; prices were high, and the catch plentiful. Hunting has also been good, and prices of fur up to the average. A decided improvement is noticeable in the dwellings and outbuildings the last few years, and the bands are beginning to appreciate the comforts of larger dwellings and better sanitary arrangements. With very few exceptions, all are nominally Christians. While not of a very high standard, no doubt it is a strong factor for the uplifting and civilizing of the people. If no other result has been achieved, it has entirely done away with the pagan rites of former days.

With the exception of a small quantity of provisions issued during the winter months to the aged and destitute, the agency is almost self-supporting. A few farm implements, such as wagons, mowers and horse-rakes are occasionally supplied; but this form of relief is being curtailed year by year. With one exception, all the bands have a day school on the reserve; and while the results of the instruction imparted are not encouraging, it no doubt acts as an incentive to the parents to send their children to the boarding and industrial schools. While on this question, I may state that the Indians of the Fairford reserve, and those adjacent to it, are very anxious for a boarding school to be started in that locality. They are quite willing that their day schools should be closed, and promise to send all their children of school age to a boarding school. Personally, I am very much in favour of their application, as I am very sure there is a good opening for it. There would be no trouble in recruiting for it, as the three bands interested are very much in earnest in their desire for such a school. In connection with the day school, I may say that the teachers act as dispensers of medicines, giving what medical assistance they can to the sick, issue provisions to the destitute, and in a number of other ways make themselves useful on the reserves. In this way they are of great assistance to the department and the bands they are engaged with.

There is but little crime in this agency. The isolation of most of the reserves from settlements, and the distance from places where liquor can be procured, is very much in their favour. Only one Indian of this agency has been convicted of serious crime in five years. This man has shown his dislike for prison life by escaping twice from jail, and is now at large.

The principal trouble is the lax regard they have for their marriage relations, and the very considerable amount of illegitimacy. This kind of immorality is very much in evidence on some of the reserves.

THE PAS AGENCY.

There are seven bands in this agency: Chemawawin, at the mouth of the Saskatchewan, where it enters Cedar lake, Moose Lake reserve, on a lake of the same name, the Pas and Cumberland on the Saskatchewan, Shoal Lake and Red Earth on the Carrot river, and Pelican Narrows in unceded territory about 100 miles north by west from Cumberland. The last named band has not been allotted a reserve, but these Indians gather for their annuities at the Hudson's Bay post before mentioned.

The members of this band are all hunters, and scatter over a large area in pursuit of game and fur-bearing animals. Quite a number of them come a distance of 400 miles to receive their annuity. They are a peaceable and contented people, and while often suffering great privations consequent upon their mode of life, they never complain, and the one bright spot in their lives is when they all meet together once a year at the annual payments.

The Indians of this agency are all Wood Crees, mostly with a strain of white blood. With the exception of the band before mentioned, all are located on reserves, and the conditions of life are much the same as those mentioned in the preceding agency. They make their living by hunting, fishing, and as boatmen and labourers for the fur-traders. On some of the reserves, when conditions are favourable, they have a few cattle, and go in for gardening. Potatoes are the staple crop. Heretofore this agency has been very much cut off from the outer world, but the prospects are

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that before another year there will be a branch of the Canadian Northern railway to the Pas reserve. This has always been the centre of the agency and headquarters of the agent. The entrance of the railway is going to revolutionize matters here, and I am afraid not very much to the advantage of the Indians, although it will make it much more accessible and more easily worked.

The Indians of this agency are a highly moral, peaceable and contented people, practically all are christianized, and there are schools and missions on all reserves. All are Anglicans except about two-thirds of the band at Pelican Narrows, these are Roman Catholics.

During the past winter there has been considerable destitution, owing to the scarcity of fish and poor hunting. For the past two years the waters of the Saskatchewan have been very low; this always means a scarcity of fish, and when the fish are scarce, the Indians are hungry, as this is their principal diet. The prospects are better for them this summer, as all the able-bodied men will be able to obtain work on railway construction. Another reason why fish are scarce is because a fishing company is operating extensively in Cedar, Moose and Cumberland lakes. This means depletion in a short time, and consequent hard times for the Indians. The whole district is unfit for settlement and will never be inhabited except by Indians; for them, while following their old mode of life, it is ideal, and the fishing should have been reserved for their subsistence. The entrance of a railway to the Pas is likely to increase very much the fishing industry; heretofore the difficulty in getting them out has curtailed the catch.

GENERAL REMARKS.

In concluding this report, I am sorry to say that during the past winter the death-rate has been higher than usual. Measles have been epidemic on several reserves in the Manitowapah agency and have carried away a number of children. In the Pas agency there has also been considerable sickness and many deaths have occurred, especially at the Pas reserve. The gratifying feature is the marked decrease in pulmonary consumption throughout the whole of my inspectorate. The Indians are paying more and more attention to sanitary matters, and the care of tubercular patients, with the result before noted.

I am about to start on my annual inspection of the reserves and bands of this inspectorate. The trip will extend over nearly three months, the greater part of the travelling is by water, and the distance in the neighbourhood of 3,000 miles.

I have, &c.,

S. R. MARLATT,
Inspector of Indian Agencies.

MANITOBA SUPERINTENDENCY,
LAKE WINNIPEG AND RAT PORTAGE INSPECTORATE,
STONEWALL, MAN., June 30, 1906.

FRANK PEDLEY, Esq.,
Deputy Supt. General of Indian Affairs,
Ottawa.

SIR.—I have the honour to present my second annual report of the condition of Indian affairs in the inspectorate placed under my supervision for the fiscal year ended on June 30, 1906.

There are 5 agencies within the bounds of my district, viz.: Clandeboye, Norway House, Savanne, Kenora and Fort Frances.

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The first-named is within the province of Manitoba. The second begins in Manitoba, but reaches out into the district of Keewatin and touches the province of Saskatchewan. The remaining three are in the westerly portion of the province of Ontario.

I have been able to visit most of the bands of this large field during the past year, and have covered much ground which was new to me.

CLANDEBOYE AGENCY.

There are three reserves in this agency, viz.: St. Peter's, Brokenhead River and Fort Alexander.

The people are mostly members of the Ojibway tribe and speak what is known as the Chippewa language, also called Saulteaux, a dialect of the original Ojibway.

Their methods of life are in a transitional state. So far as the St. Peter's reserve is concerned the time-honoured occupation of hunting has about died out. At the Brokenhead River and at Fort Alexander success along this line is becoming more precarious year by year. As a life-supporting occupation the chase is no longer a sure thing.

In place of this are the fish industry, and such other features of frontier life as steamboating, the manufacture of lumber, cutting railroad ties, and guiding parties in search of information.

Some of the best land in the Canadian west is found in this agency, but I am sorry to say that very little use is made of it. The natural aversion to agriculture leads the natives to try everything else before that. It is true that some have nice little gardens, and in fewer cases, the gardens have broadened into fields of oats or barley; but the work done is by no means commensurate with the possibilities in the case. I fear that nothing but starvation will ever bring this people down to systematic cultivation of the soil.

St. Peter's reserve is unfortunately too near to civilization. The Indians are in the town of West Selkirk almost every day, and many times over these visits are continued into the night, and are attended by the most unfortunate and corrupting circumstances.

The greatest improvements noticed are at Fort Alexander, where a broad public highway has been opened up and excellent bridges have been constructed, making travel possible and easy from end to end of the reserve, and giving to the locality an air of importance and progress.

A large boarding school has also been built, which is at once a credit to the Roman Catholic Church and an ornament to the neighbourhood. Under the patronage of the department this institution must become an important factor in renewing the intellectual life of this place.

It will not be surprising to find that the progress specified will move and stimulate the energy of individual life so that a broader and better industrial age may follow.

A serious epidemic of scarlet fever has visited Fort Alexander, and quite a number of deaths have taken place. Medical assistance was promptly sent out by the Indian Commissioner, and such relief was afforded as the distressing circumstances of the case required. Much credit was due to Dr. J. R. Steep and Indian Agent J. O. Lewis for timely help extended to these suffering people.

NORWAY HOUSE AGENCY.

This agency covers a very large area and is composed of 13 different reserves. For the most part these circle around Lake Winnipeg; but the Cross Lake band is found 100 miles north of the lake, in the valley of the Nelson river; while the Little Grand Rapids reserve is near the sources of the Pigeon river, 100 miles east of the middle of Lake Winnipeg.

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The headquarters of this agency have been permanently located during the year at Norway House, where a very fine two-story building has been erected as a home for the agent, and other minor buildings for office and warehouse purposes. Neil Gilmour, the agent in charge, is deserving of special mention for his careful supervision of these buildings during the course of erection.

The people of this agency live both by fishing and hunting. Fur has been very plentiful during the year and prices have been uniformly good. The fishing industry has steadily advanced until prices given amply repay any effort made. Many are the sources of income open to these bands, so that want, except in case of misfortune, is an unknown quantity.

Fisher river is easily the most progressive point in the agency. A good deal of land has been turned over and considerable seed has been sown. Many have large herds of cattle, and a number of good horses are shown. New houses of a superior class give evidence of a desirable progress.

This is the home of churches and schools. The department supports 13 day schools and 1 boarding school. There are 10 churches or meeting-houses. The people are nearly all favourably disposed towards Christianity, and not a few are devout members of the various denominations engaged in missionary enterprise.

The year has been marked by general good health, except in the southern portion, where a few cases of scarlet fever have appeared.

An unfortunate forest fire consumed most of the houses on the Hollowwater River reserve early in June, and as the poor sufferers lost all their belongings, there will be great destitution on the approach of cold weather.

SAVANNE AGENCY.

This agency lies to the east and northeast of what was known as Rat Portage, now Kenora. It is composed of 6 reserves and reaches from Lac de Mille Lacs to Lac Seul and Grassy Narrows. The work here is in charge of Mr. R. S. McKenzie, and, owing to the roughness of the country, is a most difficult and dangerous region to travel over. A very serious accident happened to the agent at the last payment, when his whole party narrowly escaped death by drowning, which would also have meant the loss of the treaty money and all important records. Happily this was prevented by the presence of Dr. Hanson in another canoe.

The Indians here have many sources of income, such as working in lumber camps, saw-mills, hunting, fishing, berry-picking, rice-gathering and steamboating. From such occupations an excellent living can be gained by those who are disposed to work.

The general health has been good, and no special cases of destitution have been reported.

The Indians here are for the most part pagan, are given to intemperate habits, and must be written down as belonging to the non-progressive class. The gangs of men employed in railroad construction exercise a most baneful influence over the natives, who, because they are far away from their agent, allow themselves to drift into all manner of vice.

KENORA AGENCY.

There are eleven bands in the Kenora agency, living for the most part around the Lake of the Woods and Shoal lake.

I found that the question of intoxicants was a most serious one on this ground, and one for which we have very little remedy. The extent to which the traffic has gone is positively incredible except to those who have seen with their own eyes. The frequent punishment of offenders does not destroy the traffic, hardly checks it. For the protection of these people radical measures must be adopted, and cannot be introduced too speedily.

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I found that the cultivation of the soil was not much in evidence. The people are mostly pagan, and are of the most conservative and exclusive type. The ways of their fathers are good enough for them, and they have no special leaning towards the ways of the white man.

The day schools of this agency are in a most unsatisfactory state. The Indians object most seriously to the religious teaching carried on in them. They profess to be favourable to secular and national instruction, but desire that the children be left free to choose for themselves what shall be their religious leanings.

There are large belts of very valuable timber on some of these reserves, and traces of valuable deposits of gold on others. The soil is very rich where soil is found. There is much rock and swamp land here and there. Hay-land is not plentiful, and as a consequence the cattle-raising industry is not extensively developed.

The efficient agent, Mr. R. S. McKenzie, has more territory than one man can successfully cover, and many duties which he would like to carry out must needs be left undone; but neither time nor effort are spared to further the interests of the Indians under his care.

FORT FRANCES AGENCY.

This agency is made up of fourteen bands, dwelling on the Rainy river, on Rainy lake and on tributary streams eastward.

Here again the liquor question is most prominent. One man was killed during the year on the Canadian Northern railway track, and on four different occasions the trains have come to a standstill in order to remove drunken Indians from the road-bed. Unfortunately the law of the state bordering on Canadian territory will not admit of the punishment of dealers who sell to men on our side of the boundary. The Indians, therefore, rush across the border, buy and drink, and smuggle over the cause of the ruin of every virtue.

Plenty of remunerative labour offers to all these people, but Indians are not disposed to labour heavily or continuously even for the very best of wages. Employers find that they cannot be relied upon, and have almost ceased to regard them as desirable employees except in the capacity of canoe-men or guides, and this special line of labour is fast dying out.

A beautiful boarding school has been erected at a cost of about \$27,000 quite near to the Couchiching reserve. It is a model of completeness, and is eminently adapted for the uses for which it was intended. The Indians are very grateful to the department and to the Roman Catholic Church for this latest evidence of interest in their welfare.

I found the general health of the people good. Whooping-cough was prevalent at the Long Sault reserve, but with this single exception there was no illness worthy of remark.

Mr. Wright, the agent in charge, lives 2½ miles from Fort Frances town, and his work is somewhat hindered by the location. He is a very capable officer of the department and has his work well in hand.

GENERAL REMARKS.

The three religious denominations doing effective work in this inspectorate are the Roman Catholics, the Methodists and the Anglicans. The first-mentioned has three large establishments at Cross Lake, Fort Alexander and St. Peter's, with minor posts attached. The Methodists have large missions at Fisher River, Berens River and Norway House, with out-posts as far north as Cross Lake, as far east as God's Lake, Island Lake and Little Grand Rapids. The Church of England does its largest work at St. Peter's, though it also does work as far north as Norway House, and as far south as Fort Alexander and east to Lac Seul and Fort Frances.

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I do not know which to praise most. The Methodists have been longer in the field than all others, but I am sure very excellent things may be written of each one. The Indian is a better man for the restraining and inspiring influence thrown around him by these churches and the devoted men who represent them on the firing line.

The Indian, as I observe him, is essentially law-abiding. He entertains proper respect for authority. He is not wholly indolent, but is rather spasmodic. He will work well for a time, then become careless. He must be kept at work by a ceaseless vigilance accompanied by some special inducement or encouragement. Even then he must not be goaded too much or he will grow weary and listless. If a choice offers between the time-honoured occupations of his fathers and agricultural pursuits, he will choose the former. His long hunting expeditions involve great exertion and hardship. His devotion to his family is deserving of all praise. He provides all that is possible, but he takes the shortest cuts to success and plenty, and takes out all the enjoyment possible as he goes along. He earns well, but he disburses unwisely. His appetites are strong, but his principles are weak. He purposes well, but his environments are too strong for him. He is capable, but lacks equipment and adaptation. He has been constructed and trained for a gypsy life, and we are seeking to domesticate him. Let us give him all the credit that is due. It took long centuries to make us what we are. Let us not suppose that he can reach our plane in a few years. I see no reason for discouragement. The situation should only rouse us to higher endeavour. Men who have given us peaceful possession of such a land as this and who have manifested such loyalty to the King in trying times not far back in history deserve well at our hands, and let it be spoken to the honour of the Dominion of Canada that every possible effort is put forth to further the best social, educational and moral interests of the native tribes in the hope that they may reach a worthier status and win for themselves a happier reputation.

I have, &c.,

JOHN SEMMENS,

Inspector of Indian Agencies.

MANITOBA SUPERINTENDENCY,

MEDICAL REPORT OF THOS. HANSON, M.D.,

KENORA, ONT., June 30, 1906.

FRANK PEDLEY, Esq.,

Deputy Supt. General of Indian Affairs,
Ottawa.

SIR,—I have the honour to report for the year ended June 30, 1906, that during the past year I have visited all the Indian reserves in this agency, and where required have given medical attendance and care to all cases of sickness among the Indians under my charge; and where found necessary have vaccinated those of them who had not been previously operated upon.

On the Lake of the Woods I attended the treaty payments, and remained throughout the duration of these gatherings of Indians among them. As the Indians come together at these payments from all parts of the lake, I then had an opportunity of seeing the bands collectively, and I can report that taken on the whole the health of the Indians in this district is now fairly good.

The diseases that have been most prevalent among them are scrofula, consumption, dropsy, gripe and heat troubles. A few cases of venereal disease have occurred, and the one death at Whitetish Bay was from this affliction. One death also occurred from dropsy at the Rat Portage reserve.

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The sicknesses before mentioned also prevail among the Indians of the Savanne agency.

During the year there has not been any epidemic among them. A mild form of measles broke out among the children at the Shoal Lake school.

I have performed a few surgical operations. An Indian from the Lake of the Woods lost part of his foot; this case was in the hospital here for about two months. I also amputated the thumb of an Indian woman on the Rat Portage reserve. Both of these cases have done well.

Toothache is now also becoming prevalent among them, and during the year I have been called upon to extract a great number of teeth.

All the reserves have been kept supplied with medicines for use among the Indians as required.

I have, &c.,

THOS. HANSON, M.D.

PROVINCE OF SASKATCHEWAN,

ASSINIBOINE AGENCY,

SINTALUTA, June 30, 1906.

FRANK PEDLEY, Esq.,

Deputy Supt. General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my annual report, together with a statistical statement and inventory of all government property under my charge, for the year ended June 30, 1906.

ASSINIBOINE BAND, No. 76.

Reserve.—This reserve is a block of land 8 by 9 miles in extent, south of Sintaluta village, on the Canadian Pacific railway main line, about 9 miles from Sintaluta station.

This reserve is composed of rolling land, about half is small bush and scrub, the other half is prairie; the wood is chiefly small poplar and gray willow.

Resources.—The natural resources of this reserve are hay and wood and a little senega-root. The Indians have a good market for hay and dry wood, and are selling it all the time; the demand being good and prices fair, the Indians are never short of tea and tobacco, or other little necessary comforts for their families.

Population.—The population of the Assiniboines is 203. There are about 24 in the United States at present, it is difficult to give the exact account of those away.

Occupations.—These Indians are engaged in farming and stock-raising, working out for white settlers, selling hay, wood, fence pickets, and make a good living. The crops on this reserve were good last fall, and prices fair, thus encouraging these Indians to increase their wheat and oat fields.

Stock.—The cattle on this reserve are doing very well, these Indians have in my opinion as many cattle as they are able to look after properly, as a number of the young men are going in more for grain, which will not give them time to put up a large quantity of hay for cattle. Some of the older Indians prefer to sell hay to feeding it to cattle.

Education.—There are no schools on this reserve. The young Indians are sent to Regina and Qu'Appelle industrial schools. Those young people who have been educated generally follow the teaching of the churches to which the school in which they received their education belongs. Some of the old people attend both churches.

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Characteristics and Progress.—The Assiniboine Indians are steadily advancing towards civilization and self-support. The paint and blanket is seldom seen now, with the exception of the old people. The assistance required from the department is getting less each year, as no rations are issued to able-bodied Indians who are making a good living by their own industry.

Temperance and Morality.—There are only a few of these Indians who seem to have any desire for intoxicating liquor. The morality of this band is exceptionally good on the whole. I have heard of no complaint against them since I took charge here.

General Remarks.—I am only returned to this agency a short time from Hobbema, so that I am not in a position to make as full a report as I should wish, but I may say that I started these Assiniboine Indians on this reserve 24 years ago, and a wilder lot of Indians could not be found at that time.

The chiefs were Long Lodge. The man who took the Coat and Pia-pot, so that I am glad to have the opportunity of seeing the progress they have made towards civilization.

I have, &c.,

W. S. GRANT,

Indian Agent.

PROVINCE OF SASKATCHEWAN,

BATTLEFORD AGENCY,

BATTLEFORD, July 19, 1906.

FRANK PEDLEY, Esq.,

Deputy Supt. General of Indian Affairs,
Ottawa.

SIR.—I have the honour to submit my annual report on the affairs of the Battleford agency for the fiscal year ended June 30, 1906.

This agency comprises eight reserves, situated at distances of from 14 to 144 miles from the town of Battleford.

The buildings of the agency headquarters are conveniently and centrally located on the south side of the Battle river, about 2 miles south of the town.

RED PHEASANT BAND.

Reserve.—This reserve consists of 24,320 acres, and is located 22 miles southeast from Battleford, in the Eagle hills.

Population.—The population of this band is 158.

Occupations.—The chief occupation of this band is mixed farming. They also earn a good deal of money by burning lime, selling hay and fire-wood, freighting for the railroads under construction south of this point, working, and building log houses for white settlers, and in their spare time, during the winter, they catch quite a lot of muskrat, mink, foxes and coyotes.

The resources of this reserve are excellent, the soil being a rich loam. Hay is abundant; water is plentiful, in the form of lakes all over the reserve. The wood, which was beginning to grow again very nicely, was unfortunately nearly all destroyed by fire last fall.

The grain raised on the reserve last year amounted to 2,210 bushels; and they put up 900 tons of hay. A larger acreage was under cultivation this year, and it was fully expected that the yield would be proportionately heavier; a hail-storm, however,

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recently passed over the reserve and did a considerable amount of damage to the growing grain.

Stock.—I am glad to say that these Indians take an intelligent interest in their stock, and are very careful in looking after them. The cattle are all in splendid order; the horses are being steadily improved by the influence of the stallions provided by the department.

Buildings.—This band is the most advanced in the agency with regard to buildings. The younger men, especially, are much improving their dwellings, which are roomy, well lighted, healthy and comfortable.

Farm Implements.—A full complement of farm implements is owned by these people; and they are well cared for, both in and out of use.

Education.—There is a good day school (C.E.) on this reserve. It is centrally located, and has a fair attendance. The teacher, Mrs. Jefferson, has long experience at this class of work, and uses her knowledge to the best advantage. The children progress very well, but when they are old enough, and sufficiently advanced, they are drafted into the Battleford industrial school to fill vacancies there. This drainage explains why the children in this day school do not advance beyond a certain point.

Characteristics and Progress.—The Indians of this band are a well-behaved, industrious community. They are happy and contented, but are very ambitious to become entirely self-supporting. In addition to my own influence in this direction, they are well encouraged and advised by Instructor Jefferson, who takes great interest in his work.

Temperance and Morality.—These Indians are both temperate and moral.

SWEET GRASS BAND.

Reserve.—This reserve has an area of 42,528 acres, and is located on the south side of Battle river, 20 miles west of Battleford. The land is well adapted for the raising of all kinds of grain, and for the grazing of stock. There is a fair quantity of timber on this reserve, and a good supply of water.

Population.—The population of this band is 89.

Occupations.—Grain-growing and stock-raising are the mainstay of this band. They also do a lot of work for the neighbouring white people; haul fire-wood to the settlements south of the reserve, and freight for the railroads.

Last season's crop of grain on this reserve amounted to 4,415 bushels, which is not a bad showing when it is considered that there are only seventeen workers here.

Stock.—The cattle industry is conducted very successfully by these Indians. They are good stockmen, and have a fine herd of cattle.

Buildings.—The dwellings are all made of logs, and most of them have pole roofs covered with mud. Some of the younger men appear desirous of improving their houses, and intend putting on lumber and shingle roofs; they are also making the interiors more comfortable and healthy.

Farm Implements.—These Indians are well equipped with all necessary implements for farming; and they take care of them.

Education.—There are no schools on this reserve; but ample educational facilities are provided for these children in the industrial and boarding schools of the agency.

Characteristics and Progress.—The Indians are very industrious, attend strictly to their own business, and are progressing in a gratifying manner.

Temperance and Morality.—The temperance and morality of this band are satisfactory.

POUNDMAKER AND LITTLE PINE BANDS. •

Reserves.—There are two reserves here, which adjoin one another. They are situated on the south side of Battle river, about 40 miles west of Battleford. The

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combined area is 35,200 acres, the main part of which is excellent agricultural land, the remainder being well suited for grazing purposes. Wood and water are plentiful. Of hay there is only a limited quantity, and it is difficult to get enough for the large amount of stock owned by these Indians. We have, however, managed to get along all right so far, and will have to do the best we can in the future.

Population.—The combined population of these two bands, including Luckyman band, is 226.

Occupations.—These Indians make a very good living by farming and stock-raising, working for settlers, and freighting for the railroad construction camps.

Formerly these bands were much handicapped by being so far from a market and other sources of earning money; now, however, they are surrounded by settlers, and only a few miles from the Canadian Northern railway, which circumstances have considerably helped to ameliorate their condition.

Stock.—The live stock industry is the most important on these reserves, and receives the particular care of the Indians. They have a fine herd of cattle, of which they are justly proud. The horses are being improved by the use of a good stallion, provided by the department. The sheep, pigs and poultry are all doing well, and are a great factor towards making these Indians prosperous and contented.

Buildings.—Their houses and stables are all of logs. A slight improvement is noticeable, and they are kept cleaner and more comfortable than in former years.

Farm Implements.—These Indians are well provided with all necessary farm implements, which they own and care for themselves.

Education.—A day school (Roman Catholic) on Poundmaker reserve, and a day school (Church of England) on Little Pine reserve, provide education for these bands. At Poundmaker's the attendance is irregular, but it is more satisfactory at Little Pine's. The progress is fair at both schools.

Characteristics and Progress.—These Indians are an industrious and law-abiding people, and live as well, in general, as their white brethren. They are good workers, and are doing their best to make a living for themselves; and I am glad to say that their progress is satisfactory.

Temperance and Morality.—The temperance and morality of these bands are very satisfactory; and I may say that they live very orderly lives.

STONY BANDS.

Reserves.—There are two reserves at this point, which are jointly occupied by Mosquito, Grizzly Bear Head and Lean Man bands. They are about 14 miles south of Battleford. These reserves contain 31,808 acres. They are made up of high rolling country, partially wooded with poplar and balm of Gilead. There are stretches of open prairie, containing a rich black soil well adapted for cultivation, but also liable to summer frost. On other portions, where the surface is undulating, and in the hollows and flats around the larger lakes, there are excellent hay grounds; and large tracts are well adapted for grazing and stock-raising. These Indians have ceded to the government 14,400 acres, as they said that they had enough land for their wants, and wished to realize some benefit from their surplus land, while they are yet alive, by having it sold and getting in its place farm implements, &c., and a periodical distribution of food, clothing and other necessities of life, derived from the annual interest of the balance due to them.

Population.—The population of these bands is 74.

Occupations.—The sale of hay, fire-wood and lime to the townspeople and settlers, and this year to the railway construction camps, provides these bands with a very comfortable living. They also catch some fur, and have excellent intentions with regard to farming and stock-raising; but it is a very difficult matter to get a Stony really started to work, and a much harder task to keep him working steadily. I. how-

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ever, have hopes that we may be able gradually to wean them from their old habitual idleness, and make them respectable, industrious people.

Stock.—The stock is improving slowly, but steadily. The large pasture has proved a great preventive against loss by straying, which was formerly one of the main sources of trouble on these reserves.

Buildings.—The buildings are in about the same state as was reported last year. Everything possible is being done to encourage and induce these people to better their dwellings, but not much success has been attained so far. Time and perseverance in this direction seem to be the two main requisites necessary for producing a real advancement in their mode of living.

Implements.—When these Indians get the implements they are going to receive from a portion of the proceeds of the sale of land ceded, they will own a very complete equipment of all implements they need to make a success of the farming and stock industries.

Education.—There is a very good day school on this reserve under the auspices of the Church of England; but the attendance is irregular, and progress moderate.

Characteristics and Progress.—The members of this band are law-abiding. Some of them are fairly industrious, but owing to their improvidence they do not appear to make much progress in material welfare.

MOOSOMIN BAND.

Reserve.—Moosomin reserve is 12 miles west of Battleford; it contains 14,720 acres. This land lies between the Battle and Saskatchewan rivers. The country is rolling, and partially wooded with bluffs of poplar. The soil is a sandy loam, and is well adapted for both agricultural purposes and stock-raising. Water is plentifully distributed all over the reserve. There is also a hay reserve for both Moosomin and Thunderchild bands of 1,280 acres at Round hill, 20 miles northeast of Battleford.

Population.—The population of this band is 134.

Occupations.—These Indians farm, raise stock, sell hay and fire-wood, work for settlers and railroad companies, and also do a lot of freighting. There is no hunting for them to do, and very little fishing.

Stock.—The cattle belonging to this band are very good, and are well looked after all the time.

Buildings.—The dwellings are all built of logs. They are whitewashed inside and out, and are very comfortable and clean.

Implements.—These people are well equipped with all classes of farm implements. They own them, and look after them well. Last year this and Thunderchild band bought a new threshing-separator out of the proceeds of the right of way through their reserves for the Canadian Northern railroad.

Education.—There is no day school on this reserve, but the industrial and boarding schools provide ample accommodation for all the children of this band.

Characteristics and Progress.—These Indians are very thrifty and prosperous. The progress they are making is very creditable, and, judging from appearances, it is permanent.

Temperance and Morality.—There is little, if any, intemperance; and the morals of this band are a distinct improvement upon their old-time code of ethics.

THUNDERCHILD BAND.

Reserve.—The Thunderchild reserve adjoins that of Moosomin, and is 18 miles west of Battleford. It comprises 15,360 acres on the south side of the North Saskatchewan river, and 5,440 acres on the north side of the same river; in addition to this they have a share of the hay reserve at Round hill. The land is rolling prairie, of black loam, with scattered bluffs of poplar and willow. The Saskatchewan and Battle

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rivers, also some lakes, provide the water-supply. The reserve is very suitable for mixed farming and stock-raising.

Population.—The population of this band is 117.

Occupations.—These Indians make a good living by farming and stock-raising, working for settlers, freighting, selling hay and fire-wood, and in fact will turn their hands to anything in the shape of work if they can make money by so doing.

Buildings.—All the dwellings on this reserve are built of logs, and are moderately clean, light and comfortable. Some improvement is being made, and they are kept in good order.

Stock.—The cattle on this reserve receive the best of attention from the Indians, and they are in splendid condition.

Farm Implements.—This band is well supplied with all necessary farm implements, which they own and care for themselves.

Education.—The Church of England day school still continues running. The attendance is meagre, and the progress very moderate.

Thoroughly good and solid work is being accomplished at the boarding school adjacent to this reserve, which is conducted by the Sisters of the Assumption. The pupils make really wonderful improvement. This school is an extremely good object lesson to the neighbouring reserves, and the children who have graduated from here are good farmers and housekeepers.

Characteristics and Progress.—These Indians live a peaceful and contented life. Progress is slow, but assured. They try to get on without aid from the department; and they will do so all right eventually, as they are very industrious.

Temperance and Morality.—Temperance and morality are very well observed on this reserve. There are no complaints to make on this score.

KOPWAYAWAKENUM BAND.

Reserve.—This reserve is situated on the northern shore of Meadow lake, 144 miles north of Battleford, and has an area of 8,960 acres. Meadow river, along which there is some fine timber, flows through the reserve, crossing the eastern boundary four times; Meadow lake is about 7 miles long by $2\frac{1}{2}$ miles wide. This reserve, which, at the present moment is one of the most northern in Treaty Six, is a very exceptional one, there being an abundance of fish, excellent soil, plenty of timber, and good water. The country around Meadow lake is principally prairie, with poplar bluffs. The soil is deep and heavy, and the herbage luxuriant.

Population.—The population of this band is 84.

Occupations.—These Indians depend upon hunting and fishing for a living; they have some cows, which they milk very regularly all through the summer; they also make gardens, and raise some vegetables; but they have not yet made a start at farming.

Buildings.—Some of the houses here are very good comfortable dwellings, and a slight improvement has taken place in the condition of the others.

Stock.—There are 33 head of stock on this reserve; these people take great interest in this industry, and attend well to their cattle.

Implements.—These Indians at the present time have not much need for many implements, and can get along very well with what they have.

Education.—The day school on this reserve still continues to do business; but I am sorry to say that the change of teachers last year was no improvement or benefit to this school, as no progress has been made.

Characteristics and Progress.—These Indians are progressing very slowly; it is true that they do not receive much aid from the government, as the hunting and fishing are, at present, too good, and it is difficult for them to see the necessity for farming; it will only be when two or three successive bad seasons come around, and the

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pinch of hunger is felt, that they will be induced to take a genuine interest in agricultural pursuits, instead of their unprofitable roving life.

Temperance and Morals.—This band is both temperate and moral.

GENERAL REMARKS.

Population.—The number paid this year was 882, which is an increase of 13 more than were paid last summer.

Health and Sanitation.—The health of the Indians has been very good; they had, of course, the usual run of influenza and colds, but no really bad sickness. Tuberculosis, I am glad to say, appears to be decreasing; this is, in a great measure, due to the constant endeavour of the farmers and myself to make the Indians observe the common laws of health, by keeping their houses and persons in a clean healthy state.

Stock.—The stock is in prime condition; it was well wintered, and practically no loss occurred from this cause. The calf crop is slightly larger than the usual average, and they are a fine strong lot of animals. The stock industry is here conducted on business lines, and is an excellent investment, giving good returns in the shape of cash and food.

Progress.—As an evidence of the manner in which these Indians are progressing, I would mention that during the past year they raised 21,270 bushels of grain, and put up nearly 5,000 tons of hay. We sawed about 70,000 feet of lumber, and there are enough logs cut to make 100,000 feet; they have made a lot of money by freighting supplies to the railroad construction camp, also by selling hay and fire-wood to them; working and building houses for settlers; have supplied about three-quarters of the beef and flour consumed; they have bought, out of their own earnings, 9 wagons, 14 ploughs, 14 sets of harness, 6 mowers, 8 sets of sleighs, 4 harrows, 2 disc harrows, 2 binders, 1 threshing separator, representing an outlay of \$3,200, which, I consider, is a good showing for one year.

They live very well and happily, and are comfortably clothed, and in fact are rapidly adopting the customs of the better class of white people; they are willing to turn their energies to anything remunerative; and in their business they show an amount of astuteness which would rather astonish any one who had the impression that Indians are simple, easy-going creatures; if one can once arouse an Indian's cupidity, he will scheme as cunningly, and work as steadily, as the majority of white men.

These Indians are temperate, not so much from choice, I think, as from fear of consequences incurred by breaking the law. On account of so many new settlers coming into this district, the temptations and opportunities for procuring liquor are much greater now than was formerly the case; I am glad to say, however, that we have no instances of intoxication or immorality to report from any of our reserves.

I have, &c.,

J. P. G. DAY,

Indian Agent.

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PROVINCE OF SASKATCHEWAN,

CARLTON AGENCY,

MISTAWASIS, September 17, 1906.

FRANK PEDLEY, Esq.,

Deputy Supt. General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit the following report of the Carlton agency for the year ended June 30, 1906.

STURGEON LAKE BAND, NO. 101.

Reserve.—This reserve lies about 25 miles north of the city of Prince Albert, and contains an area of about 35 square miles. It contains the Sturgeon lake within its limits, from which a quantity of fish are obtained for the use of the band. A solid belt of merchantable timber occupies the northern part of the reserve, while the southern portion contains a considerable percentage of arable land of good quality.

Population.—The population of this band is 151.

Health and Sanitation.—The health of this band has been generally good during the year, no contagious or infectious disease has been found amongst them. Sanitary measures have been carried out to a limited extent in cleanliness around the dwellings.

Occupations.—These Indians are expert hunters, and slaughter each year a considerable number of moose and deer without much regard for close seasons. The lumbering interests in the neighbourhood give ample earning opportunities, of which they largely avail themselves. Many of them have become expert log-drivers, and as such command good wages. Their cattle industry is a source of considerable profit, and their women earn a good deal by berrying and the digging of senega-root.

Buildings.—A number of the buildings on this reserve are well constructed, with shingled roofs, while others are inferior, flat-roofed shanties.

Stock.—The cattle on this reserve are well cared for as a rule, and came through the winter in good condition; they now number 278 head. The horses are chiefly of the pony type, and number 65.

Farm Implements.—These Indians are as well equipped with machinery as their past efforts in farming justify.

Education.—The day school on this reserve is in charge of Mr. Robert Bear, and under the control of the Church of England. Since its removal to the Narrows an increase in the attendance is apparent, and some progress is shown.

Characteristics and Progress.—The Indians of this band are industrious, fairly law-abiding, but somewhat difficult to manage. They seem to be growing more prosperous, and rank next to those of Montreal Lake and Lac la Ronge in independence of the ration-house. The purchase, which has been made for them by the department, of a threshing outfit to be paid from the proceeds of the sale of timber on the reserve, will prove a stimulus to grain-growing, which has been kept back by the uncertainty of getting it threshed.

Temperance and Morality.—The proximity of lumbering operations to this reserve, and the frequent facilities for getting liquor through the constant traffic to the lumber camps, are resulting in an increased desire for intoxicants, and much of the Indians' earnings are wasted in that direction. Mr. Anderson, who was farming instructor for eight years until his resignation in April, was tireless in his efforts to restrain this evil, and Mr. J. G. Sanderson, his successor in charge, will, I hope, prove equally energetic in the same matter. These Indians are about of an average morality.

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PETAHQUAKEY'S BAND, No. 102.

Reserve.—This reserve has an area of 42 square miles, and is situated on the north side of the North Saskatchewan river, and about 20 miles northwest of Carlton. It contains a good supply of tamarack and spruce, rail and building timber, is plentifully watered, has abundance of hay, and a considerable area of excellent cultivable land.

Population.—The population of this band is 107.

Health and Sanitation.—The health of this band has been satisfactory. There were no epidemics of any kind, and only two deaths during the year. The houses are clean, the premises tidy, and sanitary measures well observed.

Occupations.—These Indians live chiefly by farming and stock-raising, in both of which some members of this band are most successful. Hunting, freighting, and the gathering and sale of senega-root also contribute to their support.

Buildings.—Their houses, as a rule, are substantial, with shingled roofs; their stables well built and comfortable.

Stock.—The cattle, as usual, wintered well on this reserve, and show a creditable increase.

Farm Implements.—Excepting one or two ex-pupils, these Indians possess all the implements which their work requires.

Education.—The children of this reserve are placed in the Duck Lake boarding school as they arrive at school age; no day school being therefore required on the reserve.

Characteristics and Progress.—The members of this band are almost all half-breeds; are intelligent, energetic, and with a few exceptions manage their affairs as well as the surrounding settlers. Some of them are almost self-supporting, and the band is progressing very favourably.

Temperance and Morality.—These Indians are generally moral, but some members of the band seem less temperate than formerly.

MISTAWASIS BAND, No. 103.

Reserve.—The reserve of this band, which contains the buildings from which the agency is directed, is located at Snake Plains, 42 miles north of Duck lake, and on the Green Lake trail; it contains an area of 77 square miles, with some very good soil, chiefly on the southern portion, much scrub, and many lakes. It furnishes excellent pasturage; has a large extent of hay ground in isolated meadows; and the water is generally of good quality.

Population.—The population of the band is 129.

Health and Sanitation.—The general health of this band has been good during the year, a number of cases of scrofula, however, continue under treatment, and are slowly improving. Sanitary measures are enjoined upon them, and carried out by some.

Occupations.—Farming and stock-raising contribute most to the support of these Indians: though many of them supplement these pursuits by hunting and root-digging, and all who have teams grasp every opportunity to earn money by freighting.

Buildings.—The dwellings of this band are generally of a creditable character, composed of logs, with shingle roofs, and compare favourably with those of their white neighbours. The stables, however, are inferior, and few of them will keep out the rain, though generally comfortable during the winter months.

Stock.—I am pleased to report an improvement in the Mistawasis herd, which has increased to 226 head during the year. The winter season was unusually favourable, and the stock came through in good condition, the calf crop at the end of the fiscal year was already in advance of the total increase of previous seasons.

Farm Implements.—The department's assistance to ex-pupils during the year, with some purchases made by Indians on their own account, has materially improved

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the conditions here in regard to this matter: and a marked increase in the quantity of land under cultivation seems likely to result.

Education.—The Mistawasis day school continues to be most highly favoured in the class of teacher employed. The Rev. C. W. Brydon, B.A., Presbyterian missionary, who adds teaching to his ministerial duties, with serious detriment to his health, is a most worthy successor to his talented predecessors, Mrs. Moore and Miss K. Gillespie. The pupils whose term of education has been confined to this school are most promising, and bear favourable comparison with graduates of industrial schools. I might instance William Muchahoo and Joseph Badger, who are proving excellent workers.

Characteristics and Progress.—The Indians of this reserve are divided into two distinct groups, one of which is despicably indolent and dependent on the ration-house; and the other industrious, energetic and ambitious; desiring to increase their herds, and their acreage under cultivation, and much less dependent on assistance. The band as a whole has a much larger area under crop, and the yield and quality seems likely to be of the best.

Temperance and Morality.—I regret to say that intemperance showed a marked increase during the year. On one occasion boys under twelve years of age were drunk and quarrelsome; in another instance a woman lost a finger from consequences following a bite inflicted by her own daughter during a drunken quarrel. Accompanying this relapse was a serious increase in immorality in face of the most earnest efforts of the resident missionary.

ATTAHKAKOOP'S BAND, No. 104.

Reserve.—The reserve has an area of about 67 square miles; is situated 15 miles north of the Mistawasis reserve, and includes the Sandy lake within its bounds. It contains sufficient timber for the needs of the band; yields an ample supply of hay; possesses a large quantity of arable land with soil of good quality, and is well adapted for mixed farming.

Population.—The present population of this band is 213.

Health and Sanitation.—The health of this band has been good during the year, and sanitary measures are generally well carried out.

Occupations.—This band engages largely in stock-raising; cultivates a fair amount of land; misses no opportunity of freighting; hunts successfully, and digs and sells senega-root.

Buildings.—The buildings are generally of good quality, with shingled roofs, though a number are mere shacks, and many of the better class are in need of repairs.

Stock.—Stock-raising has proved most successful on this reserve, and the herd now numbers 435 head.

Farm Implements.—In comparison with the number of able-bodied men on this reserve, the number of implements in use is much below the needs of the band: an improvement in this respect is hoped for.

Education.—Louis Ahenakew, a member and headman of the band, teaches the day school here, which is under the control of the Church of England. The attendance is good, and progress satisfactory. This band also contributes a large number of pupils to Emmanuel College: some to the Regina industrial school, and a few to the Duck Lake boarding school. Two of the pupils attending the first-named institution graduated during the year, taking 2nd class certificates; a most gratifying circumstance alike to the band, the agency and the college.

Characteristics and Progress.—This band as a whole, and especially in the personality of its chief, ranks first amongst those of this agency. It contains some of the most intelligent and best principled Indians of the country, and in energy, industry and ambition to succeed compares favourably with many white communities; it is progressing steadily. Farming Instructor Geo. B. Ishister succeeded to the charge of this band in place of Jos. Savord, deceased, and promises to prove an excellent man for the position.

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Temperance and Morality.—The taste for strong drink unfortunately exists here, but the isolation of the reserve largely protects its inhabitants from temptation. The band has a distinctly moral tone.

KENEMOTAYOO'S BAND, No. 118.

Reserve.—This lies to the north of the Sandy Lake reserve, and is separated from it by about 12 miles. Its area is 46 square miles, most of which is under water. The lakes contained within its limits yield a fair supply of fish, with water of excellent quality. The Big river crosses the reserve, and in dry seasons a large quantity of hay may be secured along its lower banks, which in wet years are under water. There is sufficient timber and fire-wood for the needs of the band, but the quality of the soil is very inferior and discourages farming operations. The exchange of a portion of this reserve for an equal area of good land lying to the south of it, is under consideration and hoped for.

Population.—The population of the band, including the Pelican Lake portion, is 185.

Health and Sanitation.—There has been very little sickness in this band during the year, and none of a contagious nature.

Occupations.—Those who live at Pelican and Stony lakes support themselves exclusively by hunting and fishing, while those in the neighbourhood of the Big river raise stock and attempt to grow grain. Some senega-root is also dug by them.

Buildings.—The houses are the poorest Indian dwellings in the agency. Their superstitious habit of pulling down the building in which a death has occurred prevents any desire for a substantial home.

Stock.—In spite of losses the herd of this band is steadily increasing, and now numbers 111 head. Some of these Indians take good care of their animals, but the majority are indifferent, and give them little attention. The utmost vigilance on the part of the farmer is required.

Implements.—There is a fair supply of needed implements on this reserve.

Education.—The pagan portion of the band, which forms the majority, is afraid to send its children to the day school lest they should be taught the Christian religion; consequently the attendance is small. The teacher, Mr. William Bear, is attentive and interested in his work, and under more favourable conditions would be successful.

Characteristics and Progress.—With some notable exceptions, the members of this band who live near the farmer are indolent, and difficult to make anything out of. This is due largely to the inferior quality of the soil, and the usual failure of the crops. The contemplated addition to this reserve already mentioned will tend to improvement in this respect.

Temperance and Morality.—Their isolation makes intemperance rare amongst them, though the taste for liquor is clearly there. They are fairly moral, but Indian divorces on slight pretexts sometimes occur.

WAHSPATON (SIOUX) BAND, No. 94A.

Reserve.—This reserve has an area of $3\frac{3}{4}$ square miles, and lies about 9 miles north of Prince Albert. The soil is inferior in quality, and the portion suited to cultivation very limited in extent.

Population.—Only nine or ten families occupy the reserve, the major portion still reside near Prince Albert. A movement to the reserve is promised.

Health and Sanitation.—The health of these Indians is fairly good, and they obey any sanitary regulations imposed upon them.

Occupations.—Fire-wood, hay, senega-root and berries provide occupation and sustenance. As their crops will now be threshed by the Sturgeon Lake threshing outfit, more land will be cultivated by them.

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Buildings.—Their houses are inferior to those on some of the other reserves, but they are usually tidy and comfortable.

Stock.—They have about 40 head of cattle and 17 horses on the reserve, of which they take excellent care.

Implements.—They have a fair supply of implements.

Education.—There is a day school on the reserve, taught by the resident missionary of the Presbyterian Church, Mr. Jonathan Beverley, who entered upon this field during the year. His predecessor, Miss Baker, possessed the true missionary spirit, and did faithful work among these people for many years. Impaired health has compelled her retirement to Prince Albert.

Characteristics and Progress.—These people are very industrious, and under more favourable conditions as to quality of soil, and with more cattle, would soon become prosperous. The missionary and teacher also performs the duties of farmer, and is so employed by the government. This is a distinct and much needed step in advance, and as Mr. Beverley has already made quite remarkable progress in the mastery of the language, I look for substantial improvement during the coming years.

Temperance and Morality.—The members of this band are temperate, and are distinguished amongst Indians for their morality.

MONTREAL LAKE NEW RESERVE, NO. 106A.

This reserve was set apart for the use of any members of the Montreal Lake or Lac la Ronge bands who might, as hunting and fishing failed, desire to gain support from farming and stock-raising; for the latter purpose the location is particularly well fitted, as it contains extensive hay meadows. Up to the present only four or five families have availed themselves of its resources, and they have shown none of the qualities necessary to success, very little land is tilled, and their cattle, the offspring of a small herd of government animals, supplied a long time ago, number, after all these years, only 38 head.

THE MONTREAL LAKE AND LAC LA RONGE BANDS.

These Indians, especially the second-named, are a sturdy, energetic people, chiefly of mixed blood, many individuals amongst them betraying little of the Indian in their appearance. They support themselves by hunting, fishing, and by employment secured from the large trading companies. They receive only one shipment of supplies during the year, which is distributed in part at the treaty payments, a portion being reserved to relieve the really destitute during the winter.

GENERAL REMARKS.

On March 19 the office building, with an adjacent paint-shop and harness-room, was destroyed by fire, and all office copies of returns, three-fourths of the correspondence files, and many valuable documents and books were consumed. This disastrous occurrence has very seriously hampered the office work since it took place, and involves the staff in frequent loss of time. The new office-building in course of erection promises to be comfortable and commodious, and is conveniently planned.

My association with this agency only commenced June 12, and of necessity this report is based on particulars furnished. I have seen sufficient, however, to recognize the marked progress in stock-raising, and the cultivation of the land, which has attended the efforts of my immediate predecessor, Mr. Charles Fisher. For many years this agency seemed to be at a standstill, but under his sympathetic guidance a change has taken place, the herds have increased until they now total about 1,350 head, and the area under cultivation is the largest in its history. It will be my endeavour to continue this upward trend until the ideal of a prosperous self-supporting Indian community, under the protection of the government but independent of all pauperizing assistance, shall have been reached.

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The moral conditions existing here are, I regret to find, much less satisfactory. Intemperance seems to have made a marked advance wherever opportunity permitted. In this connection a serious occurrence took place in the murder of Isaac Itawepesim of the New reserve, in a drunken brawl near Prince Albert, with members of the Sturgeon Lake band. This illustrates the dangerous effects of intoxicants on the Indian temperament, and emphasizes the wisdom of prohibiting all traffic in liquor with the native race, and the absolute necessity, from a moral standpoint, of enforcing such laws, apart from the bounden duty of carrying out those sacred treaty obligations on this point, to the fulfilment of which the honour of the country is pledged.

This growth in intemperance has been accompanied also by a loosening of marriage ties, and the decided retrogression in morality of its victims, which is another effect of the abuse of liquor by these people.

My best efforts will be directed, during my connection with this agency, to the suppression of intoxicants, and the cultivation of a higher moral tone.

I have, &c.,

THOS. BORTHWICK,

Indian Agent.

PROVINCE OF SASKATCHEWAN,

CROOKED LAKE AGENCY,

BROADVIEW P.O., June 30, 1906.

FRANK PEDLEY, Esq.,

Deputy Supt. General of Indian Affairs,

Ottawa.

SIR,—I have the honour to submit the following report on the affairs of this agency for the fiscal year ended June 30, 1906, together with tabular statement and an inventory of government property in my charge.

Location of Agency.—The agency buildings are located on the northwest quarter of section 4, township 18, range 5, west of the 2nd meridian, about 9 miles northwest of Broadview.

Reserves.—The Crooked Lake agency consists of Ochapowace reserve, No. 71; Kahkewistahaw, No. 72 and 72A; Cowessess, No. 73; Sakimay and Shesheep, Nos. 74 and 74A, and Little Bone reserve, No. 73A, lying north of the Canadian Pacific railway main line, and extending from near Whitewood on the east to Grenfell on the west. The total area of these reserves is 181,676 acres. These reserves are all well situated, being convenient to good markets. Most of the soil is sandy and clay loam, and well adapted for mixed farming; an abundant supply of water is available. The natural grasses for pasture and winter feed grow plentifully along the north side of the reserves overlooking Crooked lake, Round lake and the Qu'Appelle river. The country is very picturesque.

OCHAPOWACE BAND, No. 71.

Reserve.—This reserve is situated northwest of Whitewood, and is east of the agency headquarters; it contains 52,864 acres. The soil is mostly good, although broken by sloughs and scrub, and is especially adapted for mixed farming. The reserve has an abundance of good hay-land, and a plentiful supply of wood.

Population.—This band has a population of 102.

Health and Sanitation.—Generally speaking, the Indians of this band are healthy, but many of them are old, and the birth-rate is exceedingly low. No unusual disease has visited them during the year. A few of the houses and premises are comfortable

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and neatly kept; others are unsatisfactory, and improvement in this respect is very slow.

Occupations.—Substantial increase in farming and cattle-raising has been a good feature with these Indians the past year, and most of those who do any farming will have both cattle and grain to dispose of in the fall. Many depend for a living largely on the sale of hay, wood and senega-root, all of which sell at good prices. A few of the very old get some assistance.

Education.—These Indians take an interest in the education of their children, and nearly all that are physically fit attend school.

Characteristics and Progress.—While I can safely say that the members of this band have made progress in the past year, yet I hesitate to expect a great deal except in a few individual cases.

Temperance and Morality.—During the year one complaint for intemperance was laid against a member of this band.

KAHKEWISTAHAW BAND, NO. 72 AND 72A.

Reserve.—This reserve lies north of Broadview. It contains an area of 46,816 acres of good agricultural land, much of it being first-class wheat-land. There is a plentiful supply of wood and hay.

Population.—This band has a population of 88.

Health and Sanitation.—The Indians of this band have been free from unusual disease. The proportion of old people is large, and the death-rate proportionately high. Among the deaths during the year was that of Chief Kahkewistahaw, the last of the hereditary chiefs in this agency. The houses of these Indians, with two or three exceptions, are unsatisfactory, and generally they are very bare of comfort. Where the couple are young and the wife has been brought up in a school, the houses are kept cleaner.

Occupations.—Only five Indians of this band may be said to do any farming in the way of growing grain, in addition to which they have herds of cattle; two of these have a good outfit of horses and implements of their own buying. Some of the other members of this band keep a few head of cattle, but do not cultivate any land. During the summer many of the old people gather senega-root; the occupation is a healthy and profitable one. Most of these Indians put up a good supply of hay; if they have any surplus, they can sell it; they also sell wood. The very old and infirm get some assistance.

Education.—These Indians are not opposed to education, and most of the children of school age are in school.

Characteristics and Progress.—The Indians of this band hold hard to their old traditions, and are not what would be called first-class workers, still they make a very good living, and I think that advancement may be looked for among some of the younger families. Many of the men are past the age when it is possible to do much with them, yet on the whole some progress may be noted.

Temperance and Morality.—I regret to say that there have been a number of cases of intemperance reported among these Indians.

COWESESSE BAND, NO. 73.

Reserve.—This reserve is located west of Kahkewistahaw's reserve, and north of the Canadian Pacific railway, between Broadview and Grenfell; its area is 49,920 acres. Most of the land is of good quality, and a great deal of it of exceptionally fine quality for grain-growing. The north part along the banks of the Qu'Appelle valley is well timbered. The whole reserve is well supplied with water, and hay is generally abundant, although not so convenient to the Indians' homes as on the other reserves mentioned in this report.

Population.—The population of this band is 186.

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Health and Sanitation.—With the exception of consumption and scrofula, with which a few families are afflicted, the general health of this band throughout the year has been good. Most of the Indians here are more advanced than on the other reserves, and here as well as elsewhere when the woman is an ex-school graduate, and has been out to domestic service, the surroundings of the house present a more tidy appearance. Both the men and women in this band dress well, and are clean in their person.

Occupations.—About half of these Indians depend largely on mixed farming for a living, there are some who depend a great deal on the sale of wood and hay. Most of the farming Indians in this band milk cows, and some of them make butter for their own use.

Buildings.—Some of the houses are very good log structures and well finished, the stabling in some instances is also good, but there is decided room for improvement in the buildings generally of the band.

Stock.—Many of these Indians have good horses, also small bunches of cattle. Very little destitute assistance is required in this band.

Implements.—Some of the farming Indians in this band have a good outfit of farm machinery, such as ploughs, binder, mower, rake, wagon, sleighs. A few of the young men use oxen, ploughs and harrows supplied by the department, and given to them on loan.

Education.—There is no trouble with these Indians in the matter of education, and all children of school age, unless afflicted with disease, attend school.

Characteristics and Progress.—The Indians of this band are making some progress in farming operations, although much trouble is experienced in getting them to work systematically. Last year the band threshed 7,377 bushels of grain, besides a quantity of oats estimated at 1,850 bushels were left in the sheaf and fed to stock. I am looking for a considerable increase in the crop return this year. They have got under crop 375 acres of wheat, 113 acres of oats, 5 acres of potatoes. These crops, at the time of writing, are looking well.

Temperance and Morality.—Generally speaking, these Indians are temperate. There were a few cases of intoxication reported during the year; in all cases the offenders were punished, and the parties supplying the liquor prosecuted. No cases of immorality have come to my notice.

SAKIMAY BAND. No. 74.

Reserve.—This reserve is on the west side of the north half of Cowessess reserve, and bounded on the north by the Qu'Appelle valley and Crooked lake, a small part of the reserve (No. 74A) being on the north side of the river. The area of this reserve is 25,280 acres. These Indians also have the Little Bone reserve (No. 73A) 40 miles north, containing 6,796 acres.

There is plenty of good land for farming purposes in the reserves of this band, but taken as a whole these reserves are not so well adapted for grain-growing as the Kahkewistahaw and Cowessess reserves. There is an abundant supply of wood and hay here.

Population.—The band has a population of 158.

Health and Sanitation.—The dwellings of some of these Indians are very good, others are poor. Stabling on this reserve is also very fair. Here, as on all the reserves, an effort is being made before winter closes in to have all the houses whitewashed with lime; and in the spring all garbage is gathered up and burned. The general health of this band has been very good during the year.

Occupations.—A few of these Indians carry on mixed farming and cattle-raising in a small way. They are not good tillers of the soil, but some of them take very fair care of stock. In addition to raising of grain and cattle for a living, they depend largely on the sale of wood and hay. Many in this band live entirely on the sale of wood, hay, senega-root and small furs; with the favourable prices ruling they can

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make a good living in this way. A few work out for the settlers, and are reported to me as giving good satisfaction. Some very old and infirm require assistance.

Education.—The Indians of this band are not generally favourable to the education of their children. This prejudice is hard to remove. A few children are in school, but there are many more that should be there whose parents will not consent to send them.

Characteristics and Progress.—That portion of this band known as Shesheep's Indians may be classed as peculiar. They object to government control and government assistance, desiring freedom to do as they please, and have located on the reserve as far removed as possible from the agency headquarters. These do no farming and keep no cattle. While they earn a good living for themselves, they make no progress. The Sakinay Indians, with some of Little Bone band, and a few from Shesheep's who have broken away, are making a little progress, and I think that steady advance may be expected in individual cases.

Temperance and Morality.—With a few exceptions, this band is very temperate. Only two cases of intoxication were reported during the year.

GENERAL REMARKS.

Progress.—In reviewing the work of this agency generally during the year under consideration, I think it can be fairly claimed as one of marked progress all along the line. Measured from the white man's standard, the progress may not seem great, but for Indians I think it is substantial. New land is being brought under cultivation and old fields summer-fallowed; wire fences are largely taking the place of the old rail ones as quickly as their circumstances will permit, and the working Indians are getting implements and horses at their own expense.

Cattle.—Cattle on all the reserves came through the winter in good condition; yet it is difficult to get some to provide against an unfavourable winter, in which case there would be losses. These Indians have at the time of writing 639 head of cattle of their own, besides 58 head of department oxen and bulls. Killing or selling without authority has largely ceased.

Crops.—The grain crop of last year on Cowessess, Ochapowace's, and Kahkewistahaw's reserves was not as good. The Indians of these reserves have in crop this year 825 acres of wheat and 279 acres of oats; these are looking well now, and I look for a good return at threshing.

Buildings.—During the year there has not been any very general improvement in the Indian houses, although in a few individual cases there has been improvement either by adding new additions or building a new house.

Temperance.—During the year under review many cases of intemperance were dealt with, special effort being made to bring the party who supplied the intoxicant to book, in these cases I was very successful, and the punishment meted out will, I hope, check the traffic.

Dancing.—I am especially pleased to report that during the year there have been no Indian dances held. At treaty payments it was completely absent; this was the first time in the history of the agency that this demoralizing practice was put a stop to. Among the half-breed Indians an occasional fiddle dance was given during the winter, these are perfectly harmless and innocent.

Schools.—Cowessess (Roman Catholic) boarding school, situated near Crooked lake, in the Qu'Appelle valley, is still under the charge of the Rev. S. Perrault, O.M.I., and continues to do excellent work. In addition to the regular class-room work, the girls are trained in domestic duties, and the boys are taught farm work. This school has had many improvements added during the year for the convenience and comfort of the inmates by the Rev. Brother Eugene, who is a genius in mechanics, and a splendid instructor for the pupils. The Rev. Sisters of St. Joseph keep the school-building in perfect order. Sanitary arrangements are good, and the water-supply for domestic and fire-protection is very perfect.

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Round Lake (Presbyterian) boarding school, situated at the east end of the lake of that name, and just off Ochapowace's reserve, is under the principalship of the Rev. Hugh McKay. During the year a change of teacher has been made, Miss Schmark having resigned; the class-room is now in charge of Mr. Robert Mills, who seems to be a very capable teacher. Here also the children are taught useful occupations outside of the school, the girls, cooking, sewing, &c., and the boys farm work and care of stock. This school is a very home-like place, and has more the tone of a large family than that of an institution.

I have, &c.,

M. MILLAR,

Indian Agent.

PROVINCE OF SASKATCHEWAN,

DUCK LAKE AGENCY,

DUCK LAKE, July 9, 1906.

FRANK PEDLEY, Esq.,

Deputy Supt. General of Indian Affairs,
Ottawa.

SIR.—I have the honour to submit my annual report of this agency for the fiscal year ended June 30, 1906.

ONE ARROW'S BAND, NO. 95.

Reserve.—The reserve of this band is located to the east of the south branch of the Saskatchewan river, about 13 miles from the agency headquarters, and has an area of 16 square miles. The soil is sandy and cannot be depended on during dry seasons. It is considerably broken up with small lakes and sloughs.

Tribe.—The Indians of this band are Plain Crees.

Health and Sanitation.—The health of this band has been very good. They are attentive to sanitary instructions and keep their houses fairly clean.

Resources and Occupations.—Farming and stock-raising occupy some of their time, but the older men have never seriously taken hold; still from the sale of cattle and produce, along with gathering roots in summer and hunting in winter, they make a good living, receiving but little assistance from the department.

Buildings.—Their buildings are not as good as they might be. The ease with which they have hitherto made a living by hunting, trapping and root-digging, with the consequent absence from the reserve, makes the value of a good home on the reserve appear of little importance.

Stock.—They own a fine bunch of cattle, which wintered very well, and of which they take good care.

Education.—There is no day school on this reserve, the children being sent to the Duck Lake boarding school.

Characteristics and Progress.—Having got to a stage that procures them a living, they do not show much desire to go beyond this.

Temperance and Morality.—These Indians are moral and temperate.

OKEMASSIS AND BEARDY'S BANDS, NOS. 96 AND 97.

Reserve.—The reserve of these bands borders chiefly on Duck lake and its hay marshes, being about 3 miles from the town of Duck Lake, which, having its flour-mill and good market, adds considerably to the advantages of these bands. The total area is 44 square miles. On Okemassis and part of Beardy's the soil is sandy and

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poor, but the remainder is very good on the south and west sides, these sections the Indians are now going to for cultivation, with favourable results.

Tribe.—These two bands are Plain Crees.

Health and Sanitation.—The health of these Indians has been very good, and they pay attention to sanitary measures.

Resources and Occupations.—Farming and stock-raising occupy most of their time. The younger men, having taken hold with a will, are fast making themselves self-supporting and independent. Having excellent hay-grounds on these reserves, and being near the village of Duck Lake, they have always a surplus of hay on hand, for which they find a ready cash market.

Buildings.—Some have good shingle-roofed houses, others not so good; but the general trend is towards a better order of things.

Stock.—They own a fine herd of cattle, of which they take good care.

Education.—There is no day school on the reserve. The children of Roman Catholic parents go to Duck Lake boarding school, while those whose parents are Presbyterian go to the Regina industrial school.

Temperance and Morality.—They are, for Indians, moral, and considering their proximity to the village of Duck Lake, are temperate.

JOHN SMITH'S BAND, NO. 99.

Reserve.—The reserve of this band lies on both sides of the south branch of the Saskatchewan river, 14 miles from the city of Prince Albert, and consists of 37 square miles. The soil is all that could be desired, with plenty of sloughs and upland hay, also having a large quantity of poplar timber for building purposes.

Tribe.—This band consists of half-breeds and Swampy Crees.

Health and Sanitation.—The general health of this band has been good. They keep their houses clean and attend to sanitary regulations.

Resources and Occupations.—Grain-growing and stock-raising occupy most of their time, which they supplement by hunting and root-digging.

Buildings.—In most cases the buildings are good.

Stock.—These Indians have a fine herd of over 300 head.

Implements.—These Indians have all the implements they require for their work.

Education.—There is a day school on this reserve, which has a fair attendance.

Progress.—These Indians may be said to be self-supporting.

Temperance and Morality.—They are moral and fairly temperate.

JAMES SMITH'S BAND, NO. 100.

Reserve.—This reserve is situated on the Saskatchewan river near Fort à la Corne, and contains a fraction over 56 square miles. There is a strip of it on the north side, where the land is poor and sandy; otherwise the soil on the rest of the reserve is of very good quality, interspersed with small lakes, sloughs and hay meadows, but in all a splendid property.

Tribe.—These Indians are Plain and Swampy Crees.

Health and Sanitation.—The general health of this band has been fairly good. They keep their houses clean, and attend to sanitary regulations.

Buildings.—On this reserve nearly all have good shingle-roofed houses.

Resources and Occupations.—The Indians of this band acquire a large part of their income from hunting and trapping, the country to the north and east of them being rich in game and fur. They are good hunters and trappers. They do a little farming, but the revenue so far received from the fur caught prevents them taking hold of agricultural work.

Stock.—They have a fine herd of cattle, of which they are beginning to realize the value; consequently the latter are now better cared for than in the past, and are increasing in number.

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Implement. —They have all the implements they require for farming operations, having been supplied with everything necessary in that line, payment for the same being made from funds in the hands of the department belonging to the band from sale of reserve lands.

NUT LAKE BAND (YELLOW QUILL'S) No. 90.

Reserve.—This reserve is situated in township 39, range 12, west of the 2nd meridian, and it comprises an area of 16.6 square miles. It is bounded on the west by the Nut lake, in which fish are caught. A portion of this reserve is covered with a growth of poplar and spruce; hay is abundant, and the growth of grass and peavine is luxuriant.

The nearest railway point is Wadena, on the Canadian Northern railway, some 40 miles south.

Population.—The population of this reserve is 217.

Health and Sanitation.—The general health of this band has been good. These Indians spend the greater part of their life in the open air in tents, therefore the sanitary conditions are good.

Stock.—The total number of cattle held by these Indians is 34 head. These Indians take very good care of their stock.

Occupations.—The main occupation of these Indians is hunting. So far practically nothing has been attempted in the way of farming. Fur and game were plentiful last season, and the Indians made a good living for themselves.

Implements.—Not having so far turned their attention to agriculture, they have no implements to speak of. They now, however, show an earnest desire to begin work, and no doubt the necessary implements will be supplied them.

Buildings.—So far they have not settled down on their reserve; consequently there are only one or two log buildings on the reserve. This state of things will, I have no doubt, be changed in a few years.

Education.—There is no school on this reserve, but some of the Indians expressed to me a wish that a day school should be opened, which request will no doubt be complied with.

Characteristics and Progress.—Of these Indians it cannot be said that they are progressing. The time has, however, arrived to start them, and I have no doubt that with an interested intelligent farmer stationed on the reserve their advancement in the future will be rapid.

Temperance and Morality.—Being very much in a state of nature, not much can be said for or against their temperance or morality.

KINISTINO BAND (YELLOW QUILL'S) No. 91.

Reserve.—This reserve is situated in township 42, range 16, west of the 2nd meridian, and comprises an area of 15 square miles.

The Barrier river runs through a portion of it, and the fish caught therein form a valuable source of food-supply for the Indians.

The reserve is partly covered with white spruce and poplar of good merchantable quality, and there is sufficient good arable open land for the use of the band for farming purposes.

These Indians form part of Yellow Quill's band.

Population.—The population of this band is 77.

Health.—The general health has been good during the year.

Occupations.—The Indians of this band make their living by hunting, working for settlers, and a few of them obtain employment from time to time at a saw-mill which is located on their reserve.

They are a thrifty lot of Indians, and appear to be anxious to make their living independently, which so far they have succeeded in doing.

Stock.—The cattle possessed by these Indians number 59; are a nice lot and are well looked after.

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Implements.—These Indians are well equipped with farm implements.

Buildings.—The buildings on this reserve are of the usual class found on Indian reserves. Four of the houses have shingled roofs, and the rest are roofed with sod and thatch. They are roomy and comfortable.

Education.—None of the children are attending school.

Temperance and Morality.—These Indians have a good name for being law-abiding people. I have not heard of any of them being intemperate or immoral in their habits.

Characteristics and Progress.—These Indians have now got a start under the able supervision of Mr. Hamilton, the officer in charge. The work done in seeding, breaking and fencing during the past few months is very creditable to them, and I have no doubt that they will continue to progress.

I have, &c.,

J. MACARTHUR.

Indian Agent.

PROVINCE OF SASKATCHEWAN,

MOOSE MOUNTAIN AGENCY,

CARLYLE, July 12, 1906.

FRANK PEDLEY, Esq.,

Deputy Supt. General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my first annual report, together with an inventory of all government property under my charge. As I have only been in charge of this reserve for a short time, I hope you will make allowance for any shortcomings.

Reserve.—This reserve is situated on the east end of the Moose mountain, about 6 miles north of Carlyle, on the Canadian Pacific railway, and has an area of 30,280 acres, a large portion of which is covered with timber and heavy scrub. There is very little area suitable for farming on account of its being so badly broken up with small lakes and hills. What is suitable lies principally in the southeast corner, and runs for a short distance up along the south side.

Population.—The population is 188, a decrease of 8 from last report.

Health.—The health of the Indians has been fairly good. Two have been suffering from chronic diseases, one from scrofula and one from dropsy.

Dr. Hardy, of Carlyle, looks after the medical wants of the Indians as often as required, and always visits the reserve once a month, but is very much handicapped by the stubbornness of the Indians themselves, who even at the expense of their lives refuse to be guided by his advice.

A number of the Indians are fairly neat and cleanly in their habits and houses, and some are fairly industrious, but none to an extent that is likely to injure their health.

Occupations.—They have about 250 acres in wheat and 60 in oats, and I expect when they get through breaking and summer-fallowing they will have a little over 200 acres done this summer.

The majority of the Indians have a hand-to-mouth existence here; they sell a load of wood or pickers or anything they can dispose of, and while the proceeds of that last no effort is made to procure more, and no amount of stirring up seems to have any lasting effect.

Buildings.—Some of their buildings are really good and well kept, but again a lot of them are the reverse. Quite a number of them got out logs last winter to put up new and better buildings this summer, at which they are busy now.

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Stock.—The stock on this reserve is really good, and came through the winter with no loss but one calf. But it is a hard matter to get an ample supply of hay for even the number of cattle they have now, but if the reserve were divided by a fence running east and west, so as to keep the stock off the south side of the reserve altogether, it would increase the hay-supply threefold.

There is any amount of fencing material lying in the yard both to finish the boundary and divide the reserve, and I would strongly advise its being done.

There were 4 thoroughbred bulls running with the herd last summer, but the calf crop is very light.

Farm Implements.—Now as to farm implements, the Indians have a very good threshing outfit, but their ploughs are not suited to this soil, and will not scour in the land here, and unless they do, good work and clean crops are an utter impossibility. They have three sets of good harrows and two old sets of sod harrows, a supply utterly inadequate to their requirements. They have three binders, one completely done for, and the other two very shaky. They should have a new one this year.

Education.—The day school on this reserve is in charge of Miss E. M. Armstrong, under the supervision of the Presbyterian Church. Miss Armstrong is a very capable and painstaking teacher and the pupils are doing very well. The average attendance is about the same as last year. I think a compulsory attendance at school would be a good thing for this reserve, as one-half of the available children do not attend.

Morals and Religion.—The religious teaching is given by Mr. Dodds, the resident Presbyterian missionary, who, with his estimable wife, spares no pains to try to lead them right, and who has the moral welfare of the Indians thoroughly at heart.

The Roman Catholic portion of the population receive occasional visits from a teacher of their own faith.

The Indians are making way very slowly in the right direction, but it will be a long time at their present rate of progress before they reach a position of comfort and independence.

I have had no complaints of either intemperance or immorality since my taking charge.

Staff.—Since taking over the charge of this reserve, I have been completely alone, so that any remarks as to the diligence or efficiency of the staff would look rather personal. I must acknowledge my indebtedness to Mr. Dodds for many acts of help kindly given when I most needed them in my work, they were a great help to me.

I have, &c.,

THOS. CORY,

Farmer in Charge.

PROVINCE OF SASKATCHEWAN,
ONION LAKE AGENCY,
ONION LAKE, July 1, 1906.

FRANK PEDLEY, Esq.,
Deputy Supt. General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my report on the affairs of this agency for the fiscal year ended June 30, 1906, also a statistical statement of agricultural and industrial pursuits for the same period.

Six bands are comprised in this agency, known by the following names and numbers: Seekaskootch, No. 119, Weemistioosahwasis, No. 120, Ooneepowhayo, No. 121, Puskeeahkeeweins, No. 122, Keeheewin, No. 123, and Chipewyan, No. 124.

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ONION LAKE BAND, NO. 119 AND 120.

Reserves.—Seekaskootch band, No. 119, and Weemisticooseahwasia band, No. 120, are practically speaking, one band, and are known as Onion Lake band. The reserves adjoin one another, and are situated on the north side of the Saskatchewan river, the distance from Fort Pitt to the nearest point of the southern boundary being about 6 miles. Seekaskootch reserve is about $6\frac{1}{2}$ miles wide by 9 miles long, the total area being 38,400 acres. The southern portion is wooded with poplar and pine, and contains some good pasture and hay lands, also a small picturesque lake known as Long lake. The centre is slightly undulating, interspersed with groves of poplar. Upland and slough hay are plentiful in favourable seasons, but the soil is light. The northern portion is a raised plateau, wooded with poplar, and in parts pine; there are also some patches of open prairie, which afford good pasture.

Weemisticooseahwasia reserve (otherwise known as Makao reserve) abuts Seekaskootch on the west side, the southern boundary being a continuation, for 4 miles, of that of Seekaskootch reserve. The eastern boundary extends $5\frac{1}{2}$ miles along the western line of Seekaskootch, and the northern and western boundaries run parallel with the southern and eastern, forming a rectangle containing 14,080 acres. The southern portion of the reserve is light soil, but improves towards the north; the surface is undulating, studded with bluffs of poplar and willow; the open country contains numerous sloughs which in drier seasons yield a bountiful supply of hay.

Population.—The population of Seekaskootch reserve at last treaty payments was 311, and of Weemisticooseahwasia, 87.

Health and Sanitation.—These Onion Lake Indians are comparatively healthy. There are of course cases of consumption, scrofula and sore eyes, which are common complaints among Indians, but the two former diseases are, I think, below the average. There were several cases of erysipelas of a mild type, none of which proved fatal, and as usual, during spring-time, influenza colds were prevalent. The deaths that have occurred have been chiefly among the young children. When spring opens there is a general cleaning up and burning of the refuse which collects around the houses in winter, and then the majority of the families, as soon as the weather permits, cheerfully leave their houses and take to their tents or teepees. The greater number of the houses are kept clean and comfortable. Under canvas the Indians are healthier and happier than in houses when the weather is not too cold.

Occupations.—The most important industry followed by these Indians is cattle-raising, in which they are fairly successful. The demand for beef in the neighbourhood and the supply required by the department for destitute Indians affords a market for their surplus stock. Grain-growing is not extensively followed, the total yield last harvest amounting to only 15,075 bushels of wheat, oats and barley, the bulk of which was oats. These Indians are always on the look-out for work in the way of freighting, and are frequently employed by the Hudson's Bay Company and other traders. They also receive employment from the settlers who are coming in on the south side of the river. During the past year a good deal of time was devoted to rat-hunting, at which pursuit some of them did remarkably well, as the traders were offering advanced prices for these pelts.

Buildings.—The dwelling-houses are log-walled, and the roofs are mostly made of poles and sod with a fairly good pitch, but during the past year two improved houses have been erected in which lumber sawn at the agency mill has been utilized and the roofs properly shingled; in one house especially good workmanship is displayed, and the owners take a pride in keeping them tidy.

Stock.—These reserves are well adapted for the raising of stock, and the bulls sent in by the department, being all pedigreed animals, are of a good class.

Farm Implements.—The mowers and rakes in the hands of these Indians are mostly their own property purchased out of their earnings; a number of the wagons and ploughs are also their own property, some were supplied years ago by the depart-

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ment and are now pretty well worn out; the harrows are chiefly those formerly supplied by the department; at present they have implements sufficient for their requirements.

Education.—There are two boarding schools in the neighbourhood of the agency headquarters, one in connection with the Church of England mission, and the other with the Roman Catholic Church mission; both are progressing satisfactorily and being the only schools connected with this agency, have pupils not only from Seekaskootch and Weemisticooseahwas bands, but from the other four bands dealt with hereafter.

Characteristics and Progress.—These Indians are well conducted and law-abiding, and the tum tum is not so often heard at nights as it used to be. The greater number of them are industrious, and during the past winter there was evidence of their cattle having been better cared for than during the preceding winter. The women are nearly all able to sew and make clothes for themselves and children and moccasins for the whole family.

Temperance and Morality.—I have no reason to report more unfavourably of the moral character of these Indians. The facilities of getting liquor are becoming greater as the white settlement approaches, but so far no serious ill effects are noticeable.

FROG LAKE BAND, NOS. 121 AND 122.

Reserves.—At Frog Lake there are two reserves, Ooneepowhayo's and Puskeeahkeewin's, Nos. 121 and 122, the occupants of which are generally looked upon as one band called Frog Lake band. These reserves are situated to the northwest of the agency, about 20 miles, and are of irregular boundaries, Puskeeahkeewin's abutting Ooneepowhayo's on the northern and part of the eastern boundary. Frog lake forms a portion of the eastern boundary of each of the reserves. Ooneepowhayo's contains an area of 21,120 acres. The southern part is hilly, with numerous bluffs of poplar, the open parts form good pasture and there are some small patches of good hay-land. The eastern portion is thickly wooded with poplar, and the western is rolling and abounds in willow thickets. •The general nature of the soil is sandy loam, but in parts it is soft and boggy.

Puskeeahkeewin's reserve, abutting Ooneepowhayo's on the northwest corner, contains an area of 25,600 acres. The character of the natural features is an undulating surface with numerous poplar and willow groves, and to the north and northwest some pines are to be found. In places it is marshy, and in favourable seasons only is hay plentiful. The soil is sandy loam.

Population.—The population of Ooneepowhayo's band at last treaty payments was 105, and of Puskeeahkeewin's, 29.

Health and Sanitation.—The health of the Frog Lake Indians is fairly good, consumption and scrofula are the most serious diseases affecting them. One troublesome case of rheumatism occurred. With but two or three exceptions, families may be called cleanly in their habits and methods of housekeeping. Around their houses in spring-time there is a general cleaning up and burning of the rubbish accumulated during the winter, then they take to their tents and teepees. No epidemic has attacked these Indians during the year.

Occupations.—These Indians receive very little assistance from the department in the way of food and clothing. Their principal occupation as an industry, is cattle-raising, in which some take much more interest than others, and consequently are more successful. Haymaking is rendered difficult owing to the hay patches being small and scattered, so that time in putting up hay is used out of proportion to the quantity of hay required. Only one family has taken hold of farming to any extent, and has slightly increased the acreage this spring. Hunting is followed to some extent by these Indians, and from the lake they draw a bountiful supply of fish.

Buildings.—Some of the houses are fairly good one-roomed shelters with fire-places, and some with stoves also, none of the roofs are shingled, but in winter the

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houses are warm and comfortable. The stables cannot be highly spoken of, at two places they are fairly good, but at others they do not present an industrious appearance.

Stock.—The quality of the stock is good. Two thoroughbred polled Angus bulls have been given them this year, and the interest in cattle-raising will probably increase.

Farm Implements.—There are implements sufficient for the requirements of the bands.

Education.—There are not any schools on these reserves. The two boarding schools at Onion Lake are open to them, but the Indians, although nominally christianized, are still paganish, and do not yet understand the benefits of education. Two of the children are at the Roman Catholic school.

Characteristics and Progress.—Some of the least progressive of the Indians of this agency belong to these two reserves, at the same time there are two families, one especially, who are making headway. They are less observant than the other bands of the desire of the department to cease their pagan dances, but these dances are but a very modified form of those indulged in years ago, otherwise they are law-abiding and well conducted.

Temperance and Morality.—I have no reason to believe that intoxicants are used by these Indians, but morally they are no better than neighbouring bands.

KEEHEEWIN'S BAND, NO. 123.

Reserve.—This reserve lies about 35 miles northwest of Frog lake, and to the northeast of Long lake, part of which forms the southwestern boundary. It contains an area of 18,016 acres. The southern portion of the reserve is hilly, wooded with poplar and pine. The rest is open and undulating and contains numerous hay swamps and some stretches of rich soil. The whole reserve is particularly well adapted for cattle-raising.

Population.—The population at last treaty payments was 135.

Health and Sanitation.—These Indians are healthy and require less medical attention than the other bands. No epidemic has troubled them. A dirty house is the exception and the usual spring burning of rubbish which has accumulated during the winter is attended to. Like the other bands, they leave their houses as soon as the weather will permit after spring opens.

Occupations.—These Indians do not receive any assistance from the department, with the exception of a little seed-grain and rations, which latter are given to a few who are living on Onion Lake reserve. Their chief industry is cattle-raising, in which they are succeeding satisfactorily. They have put in a little crop, which is doing well, but so far they have not much land under cultivation. The district is good for hunting and fishing, a source from which they derive a large portion of their living.

Buildings.—The largest cattle-holders of this band have been living close together, and have a common stable and shelter. The houses are comfortable and warm, but during this summer it is intended that they will separate and take up positions on different parts of the reserve, so far they have been doing well in a group and will probably do better separated, and will have better houses; they are progressive and will succeed well.

Stock.—The total number of cattle at present recorded is 212, for which, without much difficulty, an ample supply of hay can be put up. Last spring they came out of their winter quarters looking well, showing that they had been well fed and otherwise attended to. There are two thoroughbred Shorthorn bulls running with the cattle.

Farm Implements.—For the requirements of the band there is a sufficient supply of farm implements, most of which are the Indians' private property.

Education.—There is no school on this reserve, still 10 of the children are at school at Onion Lake, 2 at the Church of England boarding school, and 8 at the Roman Catholic boarding school: the parents of some of these pupils live at Onion Lake.

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The children are intelligent and are progressing satisfactorily and the parents more than most others, see the benefit accruing from education.

Characteristics and Progress.—These Indians are, on the whole, industrious, are law-abiding and are improving in circumstances.

Temperance and Morality.—Both as regards temperance and morality no cases of complaint have come to my notice since my last report.

CHIPWEYAN BAND, No. 124.

Reserve.—This reserve lies 38 miles north, and slightly west of the Onion Lake agency headquarters, and 6 miles southwest of Cold lake, from which lake it derives its name, Cold Lake reserve. It contains an area of 46,720 acres, and with the exception of a strip of land on the west side, which is marshy, is mostly hay and pasture lands. The soil is rich and loamy.

Population.—At last treaty payments the population of the band was 275.

Health and Sanitation.—During the past year a number of deaths occurred among these Indians from an epidemic which, if not diphtheria at the outset, developed into that disease before it was exterminated. The department went to considerable expense in this matter, engaging Dr. Amos, of Lloydminster, to reside on the reserve, and, in addition to treating the sick people, to disinfect the houses and Indians themselves. This work was thoroughly done, with the result that when it was finished, not another case appeared. Altogether these Indians have not enjoyed such good health as in former years. They have, to a large extent, adopted the use of stoves in their houses and have done away with the open fireplaces, which used to act as ventilators. I hope to succeed in having the fireplaces and mud chimneys re-introduced, as there is no doubt that with them the air is much purer. I have seen more of these Indians during the past year than formerly, and do not find them at all cleanly in their habits.

Occupations.—It is only in cases of destitution that these Indians receive help from the department, they live chiefly by hunting and fishing. Some of them have expressed a desire to try farming and the department will be asked to supply them some seed-grain next spring. Beyond a little garden stuff very little is raised from the soil; hitherto early frosts have been a drawback, but they do not come every year, and as settlement advances, may become less frequent.

Stock-raising is followed to some extent, but not very successfully.

Buildings.—The houses are well built and made warm for the winter, but, as before mentioned, the want of the chimneys is felt. The cattle and horse stables are fairly good, and compare favourably with those on other reserves.

Stock.—The cattle owned by the Chipewyan Indians are of a poor grade. Three good bulls were sent to the reserve last year, which will be of much benefit.

Farm Implements.—With farm implements these Indians are poorly equipped, but of mowers, rakes and wagons they have sufficient for their requirements.

Education.—Some of the children attend the Onion Lake Roman Catholic boarding school and make fair progress. The parents do not take a very lively interest in the education of their children.

Characteristics and Progress.—Hunting, their original industry, is the one still mainly followed, and from this source and fishing they gain a fair livelihood.

Temperance and Morality.—These Indians are law-abiding, and I have never discovered any of them under the influence of liquor; still I have reason to believe that it sometimes reaches them.

I have, &c.,

W. SIBBALD,

Indian Agent.

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PROVINCE OF SASKATCHEWAN,

PELLY AGENCY,

KAMSACK, July 4, 1906.

FRANK PEDLEY, Esq.,

Deputy Supt. General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my fourth annual report for this agency, together with agricultural and industrial statistics and inventory of government property under my charge up to June 30, 1906.

Reserves.—Since my last report, Fishing Lake reserve, formerly attached to Touchwood Hills agency, which comprises 22,080 acres, has been added to this agency, making in all now five reserves under my supervision, the total area of which is 153 square miles, or 97,556 acres; about 28,500 acres of this is timber, of which 25,000 acres is small poplar, the remainder being tamarack and spruce, the majority of which is on the Valley River reserve, where it is estimated there are about 2,400 acres of valuable milling timber, and some 800 acres of these species of trees on the northeast portion of Key's reserve.

COTE'S BAND, NO. 64.

Reserve.—This reserve now contains, as closely as can be calculated at this date, 21,172 acres, an estimated decrease since my last report, of 14,716 acres, which amount this band has surrendered for sale. It lies immediately north of Kamsack, a divisional point on the Canadian Northern railway.

Population.—At the last annuity payments there were 250.

Health and Sanitation.—I am pleased to be able to report that the health during the past year has been good, no epidemic or serious sickness visited any of the reserves, but there were a number of cases of pneumonia in the Crowstand school, amounting almost to an epidemic; all the pupils recovered with one exception. I cannot speak too highly of the unremitting attention given to the sick by the department's medical officer, Dr. J. I. Wallace, who came last year from Nova Scotia and settled in Kamsack, he visits sick Indians as he would white patients, daily until they are out of danger. The accumulated garbage which gathers around the houses during winter is raked up and burnt in the spring, and all necessary precautions taken to prevent sickness. The houses are kept clean and tidy.

Education.—The children of this reserve are educated at the Crowstand boarding school, which is situated on the southeast corner of the reserve. There is an average attendance of 46 pupils. Great credit is due to Miss Gilmour, the matron, and her lady assistants for the excellent work done in this school, and to the farm-instructor, Mr. Brigham, for his work amongst the boys, who here get a practical knowledge of farming, by being made to do the work themselves under his guidance. Rev. Mr. McWhinney, the Presbyterian missionary, continues his energetic and successful financial management of this institution.

Characteristics and Progress.—I am able to report another year of progress for this band; financially it has been their most successful. They shipped their first cars of wheat during the winter, which should be a great incentive for them to continue farming. They broke 222 acres of new land last year, making them 512 acres under cultivation, not counting this year's breaking. They, like all Indians, seem to have no ambition to make money more than they actually require for the necessities of life. If they had a desire to make and save it, how rapid their progress would be. Several of the hunting members of this band did well during the past winter; one of them sold \$1,400 worth of fur.

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KEY'S BAND, No. 65.

Reserve.—This reserve lies by trail 20 miles northwest of Kamsack and 3 miles west of Fort Pelly; it is bounded on the south and west by the Assiniboine river; its area is 38 square miles.

Population.—There are 89 souls in this band.

Education.—The children attend the day school on the reserve regularly, when their parents are at home, but many of them being hunters, their children have to accompany them. The Rev. Owen Owens, of the Anglican Church, acts as teacher and missionary.

Characteristics and Progress.—These people continue to make a living without any assistance in the way of food from the department, chiefly from the proceeds of their cattle, hunting, freighting and selling fire-wood. There are two carpenters and a blacksmith amongst the elderly men, who earn considerable by their work. The three young men whom I assisted to begin farming and who broke 85 acres of new land last year, seeded this down this spring and are again breaking up more new land, which looks as if they would shortly have comfortable homes for themselves; they have been a number of years out of school, and have taken no urging or driving to get them to work, which goes to prove, as far as I have found, that it is a mistake to start a young man just when he leaves school, at eighteen years old. I have yet to find the Indian boy, who after a few years at school will start in and settle down to farming willingly and try to compete, as we expect him to do, with the white settler; there may be such, but I have yet to find them. We are expecting too much. I outfitted one such boy two years ago, he has given more trouble and has had more looking after than all the others, who are some years from school. I shall not be astonished if he throws his farm up, disgusted with work.

KISICKOUSE'S BAND, No. 66.

Reserve.—The south boundary of this reserve, which abuts Cote's reserve, is 9 miles from Kamsack, its northern side is 2 miles from Fort Pelly, the Duck mountains lie to the east, while the Assiniboine river forms the western boundary. It contains 28½ square miles.

Population.—There were 136 souls in this band at the last census.

Education.—The new boarding school, of which the Rev. Father de Corby, the Roman Catholic missionary, is principal, opened last October, under the government grant, with 25 pupils in attendance. There are three Rev. Sisters, a teacher and a lay brother working in the school, the latter has charge of the boys and has started farming operations this year.

Characteristics and Progress.—This band is plodding along slowly but surely, increasing their fields, caring for their cattle and carrying on their work without worry or trouble. They sold their first cars of wheat this year, which is encouraging to the young men who started farming; part of the money so realized was spent by them in the purchase of a self-binder, disc-harrow, plough, barb-wire, &c., which goes to show an ambition to improve their positions.

VALLEY RIVER BAND, No. 62.

Reserve.—This reserve contains 11,680 acres, of which 2,400 acres are timber, spruce, tamarack and poplar. It is situated 13 miles west of the town of Grandview, Manitoba. It is well watered by Valley river and Short creek.

Population.—At the last census there were 72 souls.

Education.—The children who are being educated go the Birtle boarding school.

Characteristics and Progress.—These people support themselves by working in the lumber camps and saw-mills, selling fire-wood by the car-load, as the Canadian Northern railway passes through the reserve; they keep some 80 head of cattle, live in the midst of a splendid large game country, where moose and elk abound and where fur is

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plentiful; altogether they make a comfortable living, as their houses and clothing show.

FISHING LAKE BAND, No. 89.

Reserve.—This reserve was taken from the Touchwood Hills and added to this agency last October: it is part of Yellow Quill's band, and contains 34.50 square miles. The Canadian Northern railway runs through the reserve, in which the station of Kylemore is located. A portion of Fishing lake is in the reserve, in which numerous fish are caught. The reserve is an excellent one for agricultural purposes; its rich soil and proximity to three railway stations tends to make it a most valuable one. There is a good supply of fair-sized poplar. The rest of Yellow Quill's band have their reserve at Nut lake, 40 miles north of Fishing lake, which is now under the charge of the agent at Duck Lake agency.

Population.—There are 81 souls on this reserve.

Education.—There is a day school under the Anglican Church, on this reserve; it has been closed for the past year, owing to the want of attendance, as these people, being hunters, take their children with them in their wanderings. The school is just being reopened.

Characteristics and Progress.—These people are very little better off than when I first met them, twenty years ago, nor can it be expected that they would be, from their mode of life; they make a good living by the hunt, but spend and squander it, never think of saving a dollar to provide against sickness or a poor hunt; little can be expected from them until the hunt gives out, when they will have to cease their nomadic life and turn to farming on their reserve, which is an excellent one for that purpose. They keep a few head of cattle, but grow no grain whatever.

REMARKS APPLYING TO THE WHOLE AGENCY.

Buildings.—There has been another new frame house started on Cote's reserve this summer. A few houses have been improved by having shingled roofs and lumber floors put in. With the exception of two frames, the buildings are all of logs, of which a number were cut last winter for new houses and stables. The Indian farmer at Fishing Lake reserve, Josiah Pratt, got out six sets of house logs, which he hewed, and he is building, assisted by the Indians, new houses for these people. The majority of the houses are warm and comfortable, and are kept clean and tidy, some being neatly furnished.

Cattle.—On June 30 there were 1,083 head of cattle in the agency, an increase of 166 over the previous year, which includes 166 head of Fishing Lake reserve cattle. The past winter being an exceptionally fine one, they came through in fine condition, practically without a loss. Notwithstanding the quantity of hay that was destroyed by heavy rains in the making season, there was a large amount put up, from which the Indians sold all they could find market for, over 200 tons. Inoculating for anthrax, when branding, still continues with most satisfactory results. The Indians sold last year, 4 oxen, 44 cows and 74 three-year-old steers, for which they received \$4,279.20, besides these they killed 35 head for their own use. The heaviest expert steer weighed 1,650 pounds, the best cow 1,520 pounds, and a barren three-year-old heifer 1,803 pounds. There are 18 pedigreed Shorthorn bulls in the agency.

Farm Implements and Agricultural Progress.—There is progress in both these lines; since my last report the Indians have purchased many wagons, mowers, sleighs, cutters, bangies, barbed wire, &c., paid for by themselves, out of their cattle, grain and land money. I am pleased to see them buying direct themselves, instead of coming to the agent to get him to make the purchase, which they do when they cannot negotiate the times of payment. Progress continues in farming operations. The crop taken off last year was a heavy one, free from frost, but damaged by a continuation of heavy rains. It should prove a great encouragement to others to farm, seeing the young men, for the first time, loading their cars of wheat for shipment to Port Arthur. At

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date of writing, the crops look very promising and farmers are busy breaking new land. Of course, the employees get their set-backs and discouragements, but taking it all in all, farming is progressing steadily, surely and satisfactorily.

Temperance and Morality.—I surmized correctly when I stated in my report three years ago that I anticipated trouble in the liquor traffic, with the growth of new towns, which naturally spring up with the advent of the railway. The past year has been the most troublesome one, I am pleased to say confined entirely to two lands, Valley River and Cote's reserves, and to two or three men only on the latter reserve. I got several convictions lately against the seller, and as I included jail as well as fine in all these sentences, I feel satisfied that I have made the seller much more careful. I certainly think that if the missionary-clergy, who talk more and assist less than any other officials in regard to this evil, would lend their aid, much more could be done to stop the traffic; they can tell me of cases of drunkenness they see, but not one will lay an information.

Taking the Indians as a whole, their morality is good, indeed the Pelly Indians are as truthful, sober, honest and moral people as one would wish to work with; this is wonderful when we consider the examples of vice and temptations to do evil that are constantly shown them by white men.

General Remarks.—A steady reduction of rations still continues, which is about the most reliable way to judge progress and self-support. Only 81 sacks of flour were issued during the fiscal year just closed; 47 of them were to young men starting farming, the balance, 34, to old and destitute; this is 30 sacks less than the previous year and 172 sacks less than the year before that. During the year upon which we have just entered, it should be practically nil, except to the old, or unless we have a failure of crop from frost, when many would require relief, for it is not to be expected, amongst Indians, that the farming they have done in the past three years has placed them in such a condition as to render them independent of a bad year; of course, they have always got the hunt, that great drawback to farming in this agency, to fall back on, but I would regret to see them having again to resort to that for a livelihood; it has been hard to wean them from the chase, but it would be harder if they had to go back to it.

As will be seen by the 'Total Income' column in the tabular statement, the past has been the most successful year financially these people have yet had.

During the year, when visiting the reserves, in connection with my work, I drove 3,697 miles.

Before closing, I have again to testify to the willing assistance I have received from my clerk-interpreter, Mr. Fred. Fischer.

I have, &c.,

H. A. CARRUTHERS,

Indian Agent.

PROVINCE OF SASKATCHEWAN,

QU'APPELLE AGENCY,

BALCARRES, July 23, 1906.

FRANK PEDLEY, Esq.,

Deputy Supt. General of Indian Affairs,

Ottawa.

SIR.—I have the honour to submit the following report on the Qu'Appelle agency for the year ended June 30, 1906.

The Qu'Appelle agency consists of eight reserves: Piapot, No. 75; Standing Buffalo, No. 78; Pasqua, No. 79; Muscowpetung, No. 80; Peepeekesis, No. 81; Okanees, No. 82; Star Blanket, No. 83, and Little Black Bear, No. 84.

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PIAPOT BAND.

Reserve.—This reserve is situated about 32 miles west of Fort Qu'Appelle. It comprises the whole of township 20 and part of township 21, west of 2nd meridian, and contains in all about 58 square miles. The land is rather light, but produced very good crops last year, and prospects are good again this year. Grain matures early on this reserve and consequently seldom suffers from frost.

This reserve has abundance of hay on that portion situated in the Qu'Appelle valley, and last year was very favourable for haying here, as the river was low, and the flat dry. This year also promises to be favourable.

The wood-supply is small and consequently comparatively little wood is sold from this reserve.

Tribe and Population.—The Indians of this band, with a few exceptions, belong to the Cree tribe. The population of this band numbers 165.

Health and Sanitation.—This band may be called a healthy band. There are a few who are affected with scrofula and consumption, sore eyes and coughs. No epidemic has visited them during the year. Some improvement is being made in some of the houses, the majority of which are fairly clean and well kept.

Occupations.—The Indians of this band are gradually increasing their farming operations, and the number of cattle is increasing each year. Considerable hay was put up last year, and the surplus sold this spring. Senega-root adds to the income of almost all. This band threshed last fall 3,876 bushels of wheat and 2,934 bushels of oats, an increase of almost fifty per cent over the previous year.

Buildings.—While the houses of this reserve are all of one story, they are well built and floored, and a number now have shingled roofs. The stables are comfortable.

Stock.—The number of cattle on the reserve is increasing year by year, and several of the Indians will have a good income from the sale of steers this year, besides having beef for themselves. Good bulls, registered Shorthorns, are being used in this herd, and the quality of the cattle is good and is improving. There are a goodly number of good work horses on this reserve, and also quite a few Indian ponies.

Farm Implements.—The Indians of this reserve are well supplied with farm implements, almost all being their own property. They also own a quarter interest in a steam threshing-machine.

Education.—Of the children of this reserve some attend Qu'Appelle and some Regina industrial schools. The parents show less opposition and more interest in the education of their children than formerly.

Characteristics and Progress.—This band is making progress; the Indians are increasing farming operations, growing good crops, increasing their cattle, and require but little assistance from the government.

Temperance and Morality.—Only two cases of intemperance and none of immorality have come to my notice during the year.

MUSCOWPETUNG BAND.

Reserve.—This reserve is situated about 20 miles west of Fort Qu'Appelle, and is bounded by the Qu'Appelle river on the north, Pasqua reserve on the east, and Piapot reserve on the west. The reserve contains about 58 square miles.

The land is heavier than that of Piapot reserve, and grows heavier crops. A plentiful supply of hay for fodder and for sale can easily be secured on the reserve.

The wood-supply of this reserve is limited, but more than sufficient for the band's fire-wood at present.

Tribe and Population.—The Indians of this band belong to the Cree tribe and number 85.

Health and Sanitation.—These Indians are not nearly so healthy as the Piapot Indians. Many of the older members are affected with consumption, scrofula and sore eyes. Dr. Kalbfleisch is medical officer of this reserve.

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The younger and a few of the older members keep clean houses, but some of the older Indians cannot be induced to adopt cleanly habits.

Occupations.—The occupations of this band are farming, stock-raising, and digging senega-root. Considerable surplus hay is put up and sold. While the workers seem to be decreasing in numbers, owing to the death of some of the best, yet the acreage under cultivation increases. These Indians are very well off, owing to their large herd of cattle.

Buildings.—The houses and stables on this reserve are not at all satisfactory, the houses being all low and sod-roofed, with poor ventilation, but are, with exceptions, floored with lumber. The stables are well protected in the valley.

Stock.—These Indians have a fine herd of cattle, principally Shorthorn grades. These are pastured during the summer in a large pasture of about 9,000 acres. This field has an abundance of good pasture and grass.

Farm Implements.—These Indians are well supplied with farm implements, which have been paid for with their own earnings.

Education.—While these Indians do not, as a general rule, take much interest in the education of their children, yet they do not make much opposition to the schools. Some of the children are at Qu'Appelle industrial and some at Regina industrial school.

Characteristics and Progress.—The Indians of this band, being for the most part old men, are not very good workers, but are making a very good living by the sale of their grain, cattle, hay and wood. Some of the younger men are doing well, and some progress is being made.

Temperance and Morality.—One case of drunkenness came under my notice during the year. On the whole the band is very temperate and moral.

PASQUA BAND.

Reserve.—This reserve lies about 6 miles west of Fort Qu'Appelle, and is bounded on the north by the Qu'Appelle lakes. It extends south about 8 miles, having Muscowpetung reserve on the west. There is considerable wood on this reserve, especially in the large ravines leading back from the valley. The hay-supply is made up principally of 'prairie wool.'

Tribe and Population.—The population of this reserve numbers 131, made up of Saulteaux, with a slight admixture of Cree.

Health and Sanitation.—The general health of this band this year has been good. These Indians are more advanced and progressive than those of Piapot and Muscowpetung bands. There are a number of good houses on this reserve, and some of these are kept as clean and tidy as the best white neighbours'.

Occupations.—A number of the older Indians and nearly all the younger ones depend almost entirely upon mixed farming for their sustenance. One man on this reserve sold over \$1,000 worth of wheat last season. During the winter considerable money is earned by fishing and selling wood.

Stock.—While the Indians here, on account of the scarcity of hay, do not have as large herds of cattle as those on the two reserves above mentioned, yet enough are kept to be profitable, and they are of good quality. We are raising the quality by using good Shorthorn bulls. These cattle are kept in a large pasture during the summer.

Farm Implements.—The Indians of this band are well supplied with farm implements, which have been purchased with their own earnings.

Education.—These Indians are interested in the education of their children, and offer no opposition to sending them to school.

Characteristics and Progress.—This band is making progress year by year. Some individuals stand on a par with the best neighbouring white farmers, both in equipment and in crop returns. Last year's crop threshed out 14,909 bushels. More land has been inclosed within the fences by the different Indians this year.

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This band surrendered for sale about 24 sections of its reserve this year, which will bring in considerable ready money, and enable those who are farming to make more progress with better outfits, and will help to make the old people more comfortable.

Temperance and Morality.—While every effort is being made to prevent and suppress it, the Indians of this reserve, when so inclined, seem to have but little difficulty in securing intoxicants. Those who supply the liquor are severely prosecuted when discovered, and the Indians are also punished. Otherwise the morals of these Indians are very good.

STANDING BUFFALO BAND.

Reserve.—This reserve is situate in townships 21 and 22, range 14, west of the 2nd meridian, and contains an area of 7 square miles. The soil is very light, but yielded a good crop last year, and promises as well this year.

Tribe and Population.—The Indians of this reserve are Sioux or Dakotas, and formerly resided in the United States, in fact many of them go backwards and forwards between this reserve and the United States. The number is about 220, but it is difficult to get an exact census.

Health and Sanitation.—These are without any doubt the most healthy Indians of this agency. There is very little scrofula or consumption among them, and very little sickness of any kind.

The houses are small, but almost all are very clean. Many of the women have worked among white people, and have learned how to keep their houses, and they are not indolent.

Occupations.—These Indians farm almost all the tillable land on the reserve, and keep a few cattle. They have considerable difficulty in securing hay, and their pasturage is limited, and consequently the number of cattle kept is small. The men also work out a great deal and are in great demand as farm-hands at good wages. The women are good gardeners and raise excellent crops of corn, potatoes, onions, and other vegetables. A great many fish and muskrats are also caught.

Buildings.—The houses are small, but are well kept and tidy. There are no building logs on the reserve, and consequently building is limited. The stables are also small, but are very comfortable.

Stock.—While the herd is small and fodder hard to get, the cattle here are well kept, and add materially to the income of the band. There are some very good horses on this reserve.

Farm Implements.—These Indians are particularly well supplied with farm implements of their own purchasing, and take good care of them.

Education.—There is little or no opposition to the schools here. Almost all the children from this reserve attend the Qu'Appelle industrial school, and learn readily.

Characteristics and Progress.—The members of this band are not at all indolent, and being strong and healthy, are good farm labourers. They are very fond of sport and are known as good football players. The men, almost without exception, dress like white men, and present a fine appearance. The acreage under cultivation is gradually increasing, and last year's returns were good.

Temperance and Morality.—I regret that a few men of this band had to be punished this year for being intoxicated, but only on one occasion. Otherwise the Indians of this band are very moral.

FILE HILLS BANDS, Nos. 81, 82, 83, 84.

Reserve.—These reserves are situated in ranges 10 and 11, west of the 2nd meridian, townships 21, 22, 23, 24, about 22 miles northeast of Fort Qu'Appelle, and 10 miles north of the new towns of Balcarres and Abernethy, on the Kirkella branch of the Canadian Pacific railway. The four reserves are very much cut up with bluffs and sloughs, the greater part of the farming land being on Peepeekesis reserve, where

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almost all the farming is done. The land is a strong sandy loam, and produces good crops when well cultivated.

Tribe and Population.—The Indians, with few exceptions, belong to the Cree tribe. The population numbers: Little Black Bear's band, 60; Star Blanket's, 39; Okanees, 58; Peepeekesis, 102.

Health and Sanitation.—The general health of the Indians here is very good. Several severe cases of scrofula and consumption have caused deaths. In the majority of cases the houses are cleanly and the premises well kept.

Occupations.—All the younger Indians, and quite a number of the old are engaged quite extensively in mixed farming. The bands own a large herd of cattle, which necessitates considerable work putting up and hauling hay and feeding and caring for cattle. The wood-supply here is large, so that a considerable amount of money is earned by the Indians from the sale of dry logs and wood.

Buildings.—The houses and stables in the colony are equal to, and in fact, superior to the average buildings of the white neighbours, while among the older Indians there are quite a number of very nice houses. There are still, but gradually becoming fewer, a number of the old sod-roofed houses and stables.

Stock.—The Indians here have a large herd of cattle of very good quality, which are steadily improving, as good bulls are used. These are pastured in a large field in the summer, and are well fed and cared for in the winter by the Indians themselves.

There are a goodly number of good Canadian horses owned by the Indians of these bands, and as a thoroughbred Clydesdale stallion is used each year, at the Indian's own expense, the quality is improving. There are now a fine lot of good colts growing up. A fine lot of pigs are also kept by the ex-pupils in the colony.

Farm Implements.—The Indians are well supplied with farm machinery, and are taking better care of it as they understand it and its value better.

Education.—The Indians show practically no opposition to the schools, and many show a real interest in them. The schools which the children attend are the Qu'Appelle industrial and File Hills boarding schools.

Characteristics and Progress.—The Indians are certainly making progress, taking more interest in their work than formerly, as they see and benefit from the results. During the past year they have lived well, and always appeared to have plenty of food, clothing, and money. They are adopting more and more the white man's style of dress and manner of living.

Temperance and Morality.—There is no difficulty with the Indians here with regard to temperance or morality.

EX-PUPIL COLONY.

The ex-pupil colony, which was started five years ago, is making good progress, and is growing in numbers and in the amount and quality of the work done. As the number of homes is added to, the ex-pupils become more satisfied, and each is becoming more anxious to excel. The homes are becoming more and more comfortable, the acreage under cultivation is increasing rapidly, the horses and cattle, pigs and chickens are increasing in numbers; the wells dug this summer furnish a supply of good water; and all things considered, these young people are in a better position than most white settlers who began five years ago.

I have, &c.,

WM. GORDON.

Indian Agent.

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PROVINCE OF SASKATCHEWAN,
TOUCHWOOD HILLS AGENCY,
KUTAWA, July 3, 1906.

FRANK PEDLEY, Esq.,
Deputy Supt. General of Indian Affairs,
Ottawa.

SIR.—I have the honour to submit my annual report on this agency, together with a statistical statement and inventory of all government property for the fiscal year ended June 30, 1906.

Four reserves are now included in this agency, namely, Muscowequan's, No. 85; George Gordon's, No. 86; Day Star's, No. 87; and Poorman's, No. 88. Since writing my last report, the Fishing Lake reserve has been transferred to the Pelly agency and the Nut Lake and Kinistino reserves to the Duck Lake agency.

MUSCOWEQUAN'S BAND, NO. 85.

Reserve.—This reserve is situated about 37 miles northwest of Lipton, and comprises an area of 24,271 acres. The land is rolling prairie, interspersed with bluffs, hay sloughs and small lakes. The western end of the reserve is heavily wooded with poplar. Logs of suitable size for building purposes are easily obtained. The soil is fairly heavy clay loam, and the reserve is well adapted for mixed farming.

Population.—The population of this band is 140.

Health and Sanitation.—The general health of this band has been good during the year. There were three deaths, two from old age and one child from consumption. These Indians are very free from scrofula. No disease of a contagious nature showed itself on the reserve. The garbage which collected around the houses during the winter was raked up and burned in the spring. Dr. Harvey, of Fort Qu'Appelle, is the medical officer for this band.

Occupations.—These Indians are taking an increased interest in farming. During the year they broke up over 100 acres of new land. They had 110 acres of crop, principally oats, from which they threshed 2,256 bushels. A severe hail-storm on August 7 destroyed about one-half of the crop on this reserve.

They sold 17 head of beef cattle to buyers last fall, at an average price of \$38.63 per head, and killed a few for their own consumption.

The Indians of this band are good hunters and derive much of their livelihood in this way, and by digging senega-root.

They have a plentiful supply of wood and hay on their reserve, and with the advent of a railway the sale of these products will furnish a valuable source of income.

The women assist in earning their living by digging senega-root, snaring and trapping game.

Buildings.—The houses are small, but as a rule are fairly well kept.

Stock.—The cattle stables are warm and roomy. The cattle on this reserve are of good quality. Three pure-bred Shorthorn bulls are kept for the improvement of the herd.

Farm Implements.—The stock of farm implements and machinery is being steadily added to, and these Indians are becoming fairly well equipped in this respect.

Education.—The majority of the children of this band attend the Muscowequan boarding school, which is situated near the northern boundary of the reserve. This school is under the auspices of the Roman Catholic Church, with J. A. Magnan, O.M.I., as principal. There are 34 pupils on the roll. They have a very competent teacher in Sister Riorden, whose class-room work is excellent. The pupils have made very noticeable progress during the past year.

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The boys receive practical instruction in farming and stock-raising, and the girls are taught butter-making and general domestic work.

The acreage under crop this year is 105. Their stock consists of 74 head of cattle and 12 horses.

There are very few children of school age who are not attending school.

Characteristics and Progress.—This band is making steady progress toward self-support. They have increased their farming operations and are beginning to realize that they will have to depend more in future on farming as a means of earning their livelihood.

GEORGE GORDON'S BAND, No. 86.

Reserve.—This reserve is situated in the Little Touchwood hills, about 30 miles north of Cupar on the Kirkella branch of the Canadian Pacific railway. It comprises an area of 55.4 square miles. The larger portion of it is covered with bush and small lakes, the remainder is rough, rolling prairie interspersed with small lakes and hay sloughs. The soil is a good clay loam, which when cultivated has proved to be very prolific.

Population.—The population of this reserve is 196.

Health and Sanitation.—The general health on this reserve is only fair, although it shows an improvement over last year in this respect.

The Indians are well housed and are cleanly in their habits. The majority of them live in their houses all the year round.

The sanitary precautions as prescribed by the department are carried out as far as possible.

The great trouble on this reserve is scrofula, and it is purposed to make an effort to stamp out this disease as far as possible this summer by having the Indians move out of their houses, which will be thoroughly disinfected and replastered; and operating on those suffering from the disease will remove much of the danger of contracting the disease by contagion.

A mild type of scarlet-fever showed itself amongst the pupils of Gordon's school. The school was quarantined for five months, and great care was exercised to keep the disease from spreading on the reserve, which was successfully accomplished. The patients all recovered, except one boy, who developed consumption.

Dr. Harvey, of Fort Qu'Appelle, is the medical officer for this reserve, and he performed his duties in a painstaking and efficient manner.

Occupations.—These Indians derive their support from stock-raising, farming, sale of logs and fire-wood, trapping and digging senega-root.

There are a few who earn their living by working out.

Buildings.—The majority of the houses on this reserve are large and roomy log houses, one and a half stories high, with shingled roofs. They are well kept and are a credit to the Indians.

Stock.—These Indians possess a fine herd of cattle, which now number 437 head, an increase of 54 head during the year. They have over 10 head of horses, some of which are of very fair quality. They took good care of their stock during the winter.

Farm Implements.—These Indians are well provided with farm implements. They own their threshing-machine, which is a horse-power outfit.

Education.—The children of this band attend the Gordon boarding school, which is situated on the reserve. This school is under the auspices of the Church of England. The Indians, with few exceptions, take an interest in having their children educated. These Indians are an intelligent lot. They have their own church on the reserve, where services are conducted by the Church of England clergyman every Sunday. One of their number acts as lay reader and another as organist. They sent one of their number as lay delegate to the synod held at Regina this year. The church and premises is kept in repair, and all business in connection therewith is conducted by the Indians themselves.

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Temperance and Morality.—No complaints of intemperance or immoral conduct were brought to my notice during the year.

Characteristics and Progress.—These Indians have shown signs of progress during the year, they have increased their acreage under crop by breaking up new land. Their fields are all well fenced, and they have fenced 18 miles of their reserve line to keep their cattle from straying.

Their grain crop turned out very well, they threshed 4,956 bushels of oats, 13 bushels of wheat and 112 bushels of barley.

DAY STAR'S BAND, NO. 87.

Reserve.—This reserve is situated in the Big Touchwood hills, in township 29, ranges 16 and 17, west of the 2nd meridian, and comprises an area of 24 square miles. It is mostly covered with poplar bush, scrub, small lakes and hay sloughs. There is some open land at the southeast corner which is suitable for farming purposes. The soil is a rich black loam. Poplar logs suitable for building purposes are easily obtained on the reserve.

Population.—The population of this reserve is 75.

Health and Sanitation.—The general health of these Indians has been good during the year. All refuse was raked up from around their houses and burned this spring.

Occupations.—These Indians derive their support by hunting, digging senega-root, making mats and bead-work and working for settlers. They threshed 1,777 bushels of oats, and broke up about 40 acres of new land.

Stock.—The cattle on this reserve were well cared for during the winter. They are a good class of cattle. Two pure-bred Shorthorn bulls are used to improve the stock.

The hay-supply provided was ample for their requirements.

Implements.—This band is fairly well provided with farm implements.

Buildings.—The houses on this reserve are well built of logs with sod roofs. They are roomy and as a rule are fairly well kept. The cattle stables are of a very good class.

Education.—There is a day school on this reserve, which is very well attended. There are 16 pupils on the roll, and the attendance is very regular. The average attendance is 13. Mrs. Snythe, the teacher, is doing very good work. The Indians take a great interest in their school.

Temperance and Morality.—These Indians are very quiet, law-abiding people. They are not addicted to intemperance, and are moral in their habits.

Characteristics and Progress.—The Indians of this band have made a start at farming, and are making some progress towards self-support. They sold 11 head of beef cattle to buyers, for \$419.90, and killed a few for their own use.

POORMAN'S BAND, NO. 88.

Reserve.—This reserve is situated in township 29, ranges 17 and 18, west of the 2nd meridian. It comprises an area of 42.5 square miles. The land is rolling prairie broken by hay-sloughs, and on the east side by small lakes and scrubby poplar bush. The soil is a clay loam and the reserve is adapted for mixed farming. There is sufficient fire-wood for the use of the band on the reserve, but building logs are scarce.

Population.—The population of this reserve is 109.

Health and Sanitation.—The general health of the Indians was good during the year. No disease of a contagious nature showed itself amongst them, and there was very little sickness of any kind on the reserve. With a few exceptions, the houses are not kept as tidy as I should wish; the premises were cleaned up and the rubbish burned in the spring.

Occupations.—These Indians derive much of their income by hunting, digging senega-root and working for settlers. They sold 10 head of cattle for shipment last

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fall, and killed a few for their own use. They had 65 acres of oat crop, and threshed 3,026 bushels, and they broke up 45 acres of new land.

Buildings.—The houses are mostly ordinary one-roomed, sod-roofed buildings, nearly all of which are floored with lumber. They are warm and fairly comfortable.

Education.—A number of the children are attending the Gordon boarding school and Muscowequan boarding school, but there are several of school age who are not attending any school. These Indians, with few exceptions, are opposed to sending their children to school, and it is a difficult matter overcoming their opposition.

Temperance and Morality.—This band has a good name with regard to temperance, but so far the opportunities for obtaining liquor have been limited. Their moral conduct, so far as it came under my notice, has been very good.

Characteristics and Progress.—These Indians are the hardest lot to get along with in the agency, but they are gradually settling down. The issue of food-supplies during the year to this band was greatly reduced. They have increased their acreage and are performing their farm work better. Their progress is slow, but they have made some progress during the year.

General Remarks.—Taking this agency as a whole, the conditions throughout the year have been satisfactory. The births exceeded the deaths by 10. The Indians, by increasing their earning power, have lived more comfortably and are becoming less dependent on assistance from the ration-house. There has been a saving in the issue of food-supplies to the four reserves now included in this agency of 1,453 pounds of beef, and 60 sacks of flour over the previous year.

The agency headquarters are situated at Kutawa, in a central position between Muscowequan's reserve, which is 10 miles southeast, Gordon's reserve, 13 miles south, Day Star's reserve, 8 miles north, and Poorman's reserve, 10 miles northwest.

In closing, I wish to testify to the diligent manner in which the agency clerk has attended to his work.

I have, &c.,

W. MURISON,

Indian Agent.

PROVINCE OF SASKATCHEWAN,
NORTH SASKATCHEWAN INSPECTORATE,
PRINCE ALBERT, July 27, 1906.

FRANK PEDLEY, Esq.,
Deputy Supt. General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my annual report on the inspection of Indian agencies and reserves.

ANNUITY PAYMENTS.

On July 10, 1905, I left Battleford, where I had been occupied with the inspection of the agency, and proceeded to Carlton agency, for the purpose of making the annuity payments there. In this work I was assisted by the agent, Mr. Charles Fisher, and the agency clerk, Mr. T. E. Jackson, and the payments were completed on the 20th.

NORTHERN BANDS.

Payments were made at Montreal Lake on August 8, and at Lac la Ronge on the 15th, and in connection with these I took occasion to make a full inspection of the schools and of the general condition of the bands.

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The health of these Indians had been unusually good, notwithstanding the lack of medical attendance throughout the entire year. The medicines supplied by the department for distribution are of a simple and suitable description, and are much valued by the Indians.

At the date of payments in August, 1905, William Charles' band (Montreal Lake), numbered 198 souls, there having been 13 births and 7 deaths during the year. In James Roberts' band (Lac la Ronge), there had been 24 births and 10 deaths, and the strength of the band was 507.

I found no noticeable difference in the resources of these bands since my last visit, in 1901. While furs generally are becoming scarcer, this disadvantage is offset by a general improvement in prices. For the best hunters an excellent livelihood is assured, a season's killing of fur amounting to between \$300 and \$600 in value, while game furnishes a large part of their food-supply. Those who are unable to endure the hardships of the hunt are found located around the favourable fishing places, chiefly at river outlets. But at certain seasons even fish are liable to be scarce, and for this reason the greater part of the provisions supplied by the department were left in the hands of the overseers to be used strictly for the relief of distress, and especially during the latter part of winter and spring.

The dwellings in these regions are of a rude description, consisting of unhewn logs, carelessly thrown together, plastered with mud, and with spruce bark for roof. The occupants, nevertheless, show no slight degree of civilization, whether in their domestic life, their religious observances, or in their kindness of disposition as displayed in their relations with Indians and others around them.

There are two day schools in operation, one at Montreal Lake and one at Little Hills, about 10 miles west of Lac la Ronge. The Ven. Archdeacon McKay was occupied with preparations for the erection of a boarding school, which is to be located on the north shore of the lake about 2 miles from the old station, where the annuity payments have been made for some years past. In connection with this work, the archdeacon has established a saw-mill with water-power on the river about a mile from the lake. This should greatly diminish the cost of material for the proposed buildings, and should also prove of much advantage toward the improvement of Indians' dwellings in the locality.

MOOSE WOODS RESERVE.

This reserve is occupied by a section of a large band of Sioux, the remainder of whom are settled at Prince Albert, Qu'Appelle, and Moosejaw. This division includes 15 men, 16 women and 12 children, 43 in all.

Mr. W. R. Tucker continues in charge of the band as overseer. He resides at Nutana, 16 miles distant, and visits the reserve regularly once a week.

There had been, during the year preceding my visit, an unusual mortality among the younger element of the band, no less than seven deaths having occurred in that space of time, the victims including some of the most promising of the youth. The disease in every instance was supposed to be tubercular, and probably to have spread infectionously from one original case, that of a young man who returned from one of the schools in an advanced stage of consumption. But even if the germ were not disseminated in this manner, there is no doubt that the progress of the disease was in every instance accelerated through lack of proper ventilation in the dwellings.

The cattle industry, from which this band derives more than half its support, is a continued success. Besides providing themselves with meat, they realized a large amount from the sale of beef cattle, and there was still a satisfactory increase in their herds. The 1904 beef steers brought \$42 per head, while the 1905 sales realized only \$35, the difference being due to a drop in the market, for in both instances the price was the highest paid in the district.

Farming was left off here some years ago; but the Indians, observing the continued success that attends the industry among the settlers, are now anxious to engage in it again.

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They are on the whole an industrious class of Indians, and are ready to apply themselves to almost any pursuit that is clearly shown to be to their advantage. A twelve months' income includes the following as the principal items: beef and fat cattle, \$2,176; sale of wood, \$320; sale of hay, berries and garden produce, \$240; furs, fish and game, \$380; while their gross earnings amounted to \$72 per head.

DUCK LAKE AGENCY.

This agency was inspected in December and January.

The staff includes J. Macarthur, as agent; J. H. Price, agency clerk and farmer for Beardy's and Okemahsis' bands; Henry Gardipie, interpreter; Louis Marion, farmer on One Arrow's reserve; Alex. Campbell, farmer on John Smith's reserve; and Horace Adams, farmer on James Smith's reserve, situated at Fort à la Corne.

BEARDY'S AND OKEMAHSIS' BANDS.

Formerly the majority of Beardy's band were clustered in the neighbourhood of the agency headquarters, regardless of the inferior quality of the land there. Of late, however, a large number have removed to the southern and southwestern portions of the reserve, where some occupy very favourable locations affording greatly improved facilities for grain-growing, in some instances also more convenient than formerly to their hay meadows.

In the migration some rather good houses were of necessity abandoned, and these had as yet been replaced by only poor temporary shanties.

The interest in agriculture is lively and encouraging. On the new locations 85 acres of new land had been broken, and elsewhere a considerable area of fall-ploughing had been done. The wheat crop of 1905 was a fair yield, and for the most part it graded No. 2 Northern.

As might be expected, owing to the scattering of the Indians to remote parts of the reserve, they cannot be as frequently visited, nor their work as conveniently supervised as formerly.

What is most encouraging in connection with these bands is that the prosperous element is largely made up of young men and women, including James Seesegwas, Solomon Brittain, Napoleon Sutherland, Tommy Sutherland, Walter Little Pine, and Donald Gamble, and their wives, almost all ex-pupils of the schools.

ONE ARROW'S BAND.

The members of this band, unlike many others, are of almost pure Indian blood. They are on this account less progressive, but not less orderly than other Indians. Their supervision is indeed a very slight care to the farmer.

Farming and gardening have been much neglected, but the cattle industry is prospering. The band supplies its own beef, has had a number of head for sale, and yet there is a substantial increase in the herds. The prices realized for fat cattle here as elsewhere throughout the agency were very poor, owing to the depression of the market in the fall of 1905. Had the steers been held and kept in condition for the spring market or broken during the winter for work oxen, their price could have been doubled.

For the twelve months ended December 31, last, considerably more than half the earnings of the band were derived from the sale of furs and senega-root. These primitive industries have of recent years been very productive, but are likely to decline rapidly as the district becomes occupied with settlement.

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JOHN SMITH'S BAND.

There is a distinct improvement in the sanitary condition of the dwellings. Some old houses have been enlarged, and some new ones have been built with higher ceilings and better provision for lighting.

Farming has been attended with very poor success during the past year. The 1905 crop showed a decreased acreage and a yield only larger than that of 1904, but much smaller than preceding years.

Owing to a very unfavourable haying season and the fact that the Indians of this band supplement the hay-supply only to a very limited extent with the products of the farm, it was found necessary to make unusually heavy sales, though the market for fat cattle was at the lowest point it has reached in this locality for years. Further, 46 head of cattle were beefed, in several instances without permission, and including some young stock. In this way the strength of the herds has been materially reduced.

A farmer's services are of but little value to this band, as they are subject to his control only to a very slight degree.

JAMES SMITH'S BAND.

Continuing the marked improvements of the past few years, three new houses of an improved description were built during the summer of 1905. Two granaries were also built, and two wells dug, one of them cribbed with lumber and covered with a suitable house.

The grain crops were damaged by hail, and in any case the area was not large; so that the return is, with one exception, the smallest in the past six years; whereas under present improved conditions a large increase might be expected.

The cattle industry showed good management. Twenty-eight head had been beefed within a year for the food of the owners, the smallness of the number being explained by the fact that deer and moose were plentiful in the country to the east and north, and many had been killed. Thirty-eight head were sold at moderate prices to local butchers. There was a net increase of 21 head in the herds.

Two convenient cattle ranges have been fenced, inclosing altogether about 4 square miles. The fences consist of tamarack posts, set 10 feet apart, with three strands of barbed wire. These fences were but poorly provided with gates, and the Indians recklessly cut through the wires in several places, showing a very slight regard for property provided out of their own funds.

There is a noticeable improvement in the moral and social condition of the band throughout, and for this much is attributable, among other influences, to the work of Mrs. Godfrey, teacher of the day school at the south end of the reserve. On the evening of January 19, I attended a school entertainment there, in which not only all the pupils took part and did themselves credit, but also the chief and other adults. The entertainment was well attended, the programme was thoughtfully devised, and the whole effect could not fail to be beneficial.

KINISTINO BAND.

At the date of inspection, January 21, this band was in charge of Mr. Reginald Beatty as overseer. Shortly afterwards Mr. P. C. Hamilton, who was transferred from Touchwood agency, took charge as farmer.

This band numbers about 75 members, and is a section of a large band of Saulteaux scattered in different parts of central Saskatchewan.

They are all pagans and live in a very primitive way, very dirty and robust.

The men are industrious and at times earn good wages taking out saw-logs and at other work in connection with a saw-mill which is situated on the reserve, but which is not operating this season.

Apart from this they maintain themselves as yet by hunting for the most part. They have nearly 50 head of cattle, and this season they have several small fields of

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oats, mostly late, but yet with a fair prospect of maturing; and they are anxious to do more farming.

Meantime they are not by any means in want; on the contrary, they are comfortably clothed and nourished, and there is a general appearance of comfort in their homes.

CARLTON AGENCY.

The inspection of this agency was made at intervals during April, May and June.

Mr. Charles Fisher, who had charge as agent since last inspection, in November, 1904, has now been replaced by Mr. T. Borthwick. The staff further includes Mr. T. E. Jackson, as clerk; Rupert Pratt, interpreter; J. McKenzie, engineer and miller, and four farmers.

The agency office was destroyed by fire on the night of March 19. Most of the office furniture was consumed, as well as some valuable records. Since then three small rooms in the agent's dwelling have been utilized for office purposes, and some progress has been made toward the erection of a new and more suitable building than the former one.

MISTAWASIS AND MUSKEG LAKE BANDS.

These bands are under the immediate supervision of the agent, the agency headquarters being located near the centre of Mistawasis reserve.

The health of these bands has been unusually good during the past year. There has been practically no medical attendance, and yet the want of it has not been severely felt. The services of the agency clerk in this connection are much appreciated by the Indians. In one instance in which a boy's leg was amputated, the medical attendant was unable to return after the operation to dress the limb and look after the patient's condition. This work accordingly devolved upon the clerk, who attended to it for nearly a month with most satisfactory results.

A number of able-bodied men belonging to these bands, who left the reserve some years ago, continue to live abroad, earning their livelihood in various ways; but, so far as I can learn, conducting themselves in an orderly manner wherever they may go.

The regular inhabitants of the reserve show a distinct improvement in their condition. There is a satisfactory increase in the area of land cultivated, and the yield for last season was very good. The cattle industry also is once more on a good footing.

Among the young men of the band the following may be regarded as making satisfactory progress: Willie Dreaver, Robert Head, Jean Ledoux, Jacob Badger, Willie Muchahoo, Solomon Johnstone, André Lafond, Edward Lafond, and Edward Arcand, all ex-pupils of the boarding or day schools, and accordingly equipped with all necessary education. They have recently received substantial assistance from the department, by which they are much encouraged.

AHTAHKAKOOP'S BAND.

About August 1, last, Mr. Joseph Savard, who had had charge of this band for three years, was removed through illness, which terminated soon after in his death. From that time until the middle of March there was no regular farmer, when Mr. George Isbister, a farmer from the adjacent settlement, was appointed and took charge. Many matters had been neglected in the meantime, but the new farmer fortunately took up his duties in time to make preparations for the season's farming.

There is a large increase in the acreage under crop this season, and as the conditions for growth have been most favourable, a good return may confidently be expected.

The condition of the cattle industry is most encouraging. In the past twenty months, including the increase and decrease of two seasons, there is a net increase of forty per cent in the herds. It is with much difficulty that the necessary supply of hay

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for the wintering of the herds at this strength can be procured; and it is satisfactory to note that the owners of the largest herds are also the men who are doing the largest amount of grain-growing, as the by-products of the latter industry go far to insure the success of the former.

BIG RIVER BAND.

Mr. James Dreaver has been in charge of this band as farmer for nearly eight years.

There is an evident desire on the part of these people to improve their dwellings even under difficulties, for they have never had the use of the agency sawing outfit here. A few new houses have been built, which are larger and better lighted than the shanties formerly occupied, the lumber required for floors, doors, and casings having been procured from the Indians at Sandy Lake. There are still several houses badly constructed and poorly ventilated, and two at least overcrowded and dirty.

An effort is made to raise grain, though the conditions are rather unfavourable, owing to the barrenness of the soil. The Indians' cattle herds have increased to nearly a hundred head, and during wet seasons, when the hay-lands on the Big river are inundated, it is difficult to provide for the wintering of a larger number. In dry seasons, however, 500 tons of hay or more can be readily secured. A few of these Indians show an ambition to live by their farms and their stock, but at present all live largely, and many live entirely, by the product of the hunt, and by the splendid fish of the lakes within the borders of the reserve.

STURGEON LAKE BAND.

Patrick Anderson, who had been in charge of this band for nearly eight years, withdrew from the service at the end of April, and was succeeded shortly after by J. G. Sanderson, a farmer from the Shellbrook settlement.

Some of the less progressive element of the band, who have been clustered around the east end of the lake, have made preparations for building farther to the west and nearer to the school and to the centre of the reserve. The movement, even though limited to a few, will have a beneficial effect.

The facilities for farming here are excellent, and for the encouragement of the industry a threshing outfit has recently been provided, to be paid for out of the funds of the band. The market, moreover, for grain and other farm produce is particularly good, owing to the proximity of the lumber camps and mills. But the wages paid for river-drivers just after the opening of spring are also good, ranging from \$1.50 to \$2 per day: and this is sufficient to cause many to neglect the sowing of grain and planting of gardens, at least at the proper time.

For beef also there is a good demand at the camps. There is a large increase in the herds. The stock wintered only moderately well, not because of scarcity of feed, for there was a quantity of hay left over, but because owing to the mildness of the winter the usual care and feeding were neglected.

The farm dwelling is in the worst need of repairs and improvements, which have been begun, and will be carried out during the summer, as far as the money available will permit.

There was much sickness in the band during the winter, including cases of typhoid fever, scarlet fever, and consumption. The majority of these people are heathen, and in some instances they refuse medical attendance by a qualified physician, trusting rather to their own medicine men.

WILLIAM CHARLES' RESERVE, No. 106A.

This reserve is occupied by half a dozen families from Montreal Lake and Lac la Ronge. With the exception of one or two individuals, they lead a very respectable life. Their livelihood is a rather precarious one, derived from hunting, river-driving and

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other labour for the lumber companies, and giving meals and keeping lodgers, affording accommodation to travellers en route to Montreal Lake and the different lumber camps. But their houses are of a good class, a description that is not found in the north country from which these people come; and they are kept unusually well within.

WAHSPATON BAND (SIOUX).

This band is located on a reserve situated 9 miles northwest of Prince Albert.

It was inspected on April 20 and June 21. I visited it again on July 17, in company with Miss Craig, secretary of the Women's Foreign Missionary Society, of the Presbyterian Church, Rev. Colin Young, of Prince Albert, and others.

At the beginning of October last, Mr. J. Beverley took charge as missionary-teacher and farmer. This is the first regular supervision that has been provided by the department for this band.

By degrees these Indians are being led into agricultural pursuits, and they have recently had liberal encouragement from the department in an issue of oxen, cows, and implements, which were much needed, and are likely to be used to good advantage.

Seed grain was also provided. It was not possible to use all that was allowed, as preparation for sowing had not been made in time; but a fair acreage, including about 20 acres of wheat and about 30 of oats, was sown; and although the land is light and some of it cropped too long, yet there are prospects of an encouraging yield.

There is an increase of 100 per cent in the cattle of this reserve since last inspection. This includes 10 head received from the department, but without counting these, there is still a net increase of 68 per cent.

The income derived from agricultural sources is supplemented by the products of hunting, root-digging, and berry-picking.

These people have but little skill in house-building. They seldom attempt to hew a log or corner a log wall properly. A few of their houses are without floors, but those that are floored are tolerably well kept, especially where there are girls growing up who have attended the day school on the reserve, where for some years they received a very useful training under Miss Baker, the former missionary-teacher.

A large part of this band, numbering nearly a hundred, still occupy an encampment on the north bank of the river, 3 miles below Prince Albert. They earn a comfortable livelihood and object strongly to reserve life, but are anxious to secure land by purchase or otherwise, and to hold the title to it.

OTHER AGENCIES.

I did not make an inspection of the Battleford and Onion Lake agencies during the past year.

I have, &c.,

W. J. CHISHOLM,

Inspector of Indian Agencies.

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PROVINCE OF SASKATCHEWAN,
SOUTH SASKATCHEWAN INSPECTORATE,
BALCARRES, July 14, 1906.

FRANK PEDLEY, Esq.,
Deputy Supt. General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my second annual report on the work of the different Indian agencies within the South Saskatchewan inspectorate, over which I have supervision.

During the months of July and August I was unable to make any regular inspections of agencies. My time was taken up in superintending the work of rebuilding the Qu'Appelle industrial school, building a new residence for the agent at the Assiniboine agency, and a new home for the farmer at Moose Mountain, as well as many other special matters. I was, however, able to visit all the agencies and schools within the year, and at most points made a general inspection.

MOOSE MOUNTAIN AGENCY.

I inspected this agency twice during the year, as well as making three special visits. My first inspection of the agency was made between September 13 and 18. I was not at all pleased with the condition of affairs. The cattle had not been rounded up once during the whole summer, haying operations were away behind, and grain standing that, in my opinion, should have been cut days before.

The farm-land on this agency has been neglected, and is very dirty with foul weeds; this, together with dirty seed, late sowing and late harvesting, has made farming at this point a very unprofitable business of late.

The cattle I saw were in good condition, in fact, as good as any that could be found in the surrounding district.

The Indians here do not turn out as early as they should in the mornings. While at the agency I watched the matter very closely, and found that many of them were just beginning their day's work at 9.30 and 10 o'clock, and, of course, little can be accomplished by this way of farming.

I have been in touch with the Indians of South Saskatchewan for the last twenty-one years, and I am sorry to say that there has been less progress in this agency than in any other in the district.

While at the agency on this trip I purchased material, engaged mechanics, and had the following work done: new house for the farmer, and the whole of the agency buildings repaired and repainted.

On April 26 I again visited this agency and made a general inspection. I found the cattle, especially the oxen and yearlings, in poor order indeed, and this is what I expected, judging from the quality of hay fed and style of feeding during the winter. The cattle have decreased some 40 head in this agency in the last nine months. There were 274 head on hand at the time of my inspection. The government has supplied the Indians with first-class bulls, and the foundation is here for a first-class herd, but if calves and yearlings are stunted through lack of care and feed, the standard of the herd will soon become lower.

Seeding operations were going on, but in my opinion, were late again. There being no summer-fallow, most of the land had to be ploughed in the spring, and as a result seeding was late. I have impressed upon those in charge here the importance of summer-fallowing.

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In accordance with instructions from the department, I transferred the management of this agency from Mr. Dickinson to Mr. Cory, who has been acting as farmer in this agency.

The books and statements were audited to date and transfer sheets were signed by Mr. Dickinson and Mr. Cory.

TOUCHWOOD AGENCY.

Although I visited this agency several times during the year, I did not make my general inspection till March 13.

I made a thorough inspection of all the cattle in the agency, and it was a pleasure to find that they had been well cared for during the winter they had just passed through. Many of them looked like animals that had just passed through a summer's grazing. I saw an abundance of hay at nearly every stable.

In addition to selling 38 head of cattle to Gordon and Ironside last fall, these Indians butchered for their own use their beef requirements for the winter, as well as supplying the two boarding schools with what beef they required. After selling all this beef, the herd of this agency increased by 108 head since last inspection, a year ago.

The government bulls were looked after by the farmers throughout the winter and were in splendid order.

Last fall the Touchwood Indians threshed out their record crop, about 12,000 bushels of oats. This was very good, when one considers that the reserves of this agency were visited by a severe hail-storm in August, which reduced the yield at least twenty-five per cent.

Last year, after seeding operations were over, the Indians started in to break new land and plough up old fields that had been abandoned, and while all of this land was not disked as I would like to have seen it, still most of it was in good condition for this spring, and the result is that the crop is put in in much better order this year than it was last year, and as the season is quite as favourable, I am looking for greater results.

These Indians were considerably in debt for machinery purchased on their own account years ago. I am glad to inform the department that most of this old indebtedness has been wiped out during the past year.

The Indians of this agency hunt extensively in the fall and spring. They kill a great many muskrats, and I am told that last winter a great many mink also were killed.

The main line of the Grand Trunk Pacific runs through Muscowequan's reserve, entering at the southeast corner and leaving at the northwest corner.

The agent's house has been repaired and now presents a very comfortable appearance.

I found the agency headquarter buildings and premises clean and neat.

The office work was well done and up to date.

There has no doubt been advancement among these Indians, and this state of affairs is due to close and wise supervision by the agent. I am looking for greater results next year.

PELLY AGENCY.

I made an inspection of this agency early in April last. I began my inspection in the office, and I found that the books, records, &c., had been kept in a very satisfactory manner.

I next drove over the different reserves for the purpose of counting and examining the cattle, which had just left the stables after being wintered. On Kitchener's and part of Cote's reserve I found that the cattle had been wintered well. On the south end of Cote's reserve they looked thin, and had no doubt been poorly wintered. The stabling on this reserve is poor and should be attended to at once, for if we have a severe winter the casualties will be great.

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These Indians sold 75 head of cattle to local buyers last fall, and in addition to this killed several for their own use. The average price for the cattle sold was \$35. After selling this number the herd has not decreased since last inspection.

The manner in which the Indians prepare the land for crop is not all that it should be in this agency. There was no summer-fallow, and the crop, outside of that on breaking, was put in on spring and fall ploughing. Wheat will grow in such seasons as we have had for the last three years, but if the seasons become the least dry, wheat crops will be a failure sown on late spring and fall ploughing.

These Indians had a good crop last year and the agent has worked hard to bring about this satisfactory state of affairs. Last year 4,289 bushels of wheat and 14,235 bushels of oats were threshed, making a total of 18,524 bushels of grain. This is no doubt the record crop for Pelly agency to date.

Last year 360½ acres of new land were broken, but only half of it was disked. I believe the agent did his best to persuade the Indians to disc the land, but they had their own ideas and reasons for not doing it.

I saw some very nice houses in this agency that were particularly clean.

There are quite a number of ex-pupils in this agency, and it is these young men who are doing most of the farming.

The agent has had trouble with the Indians procuring liquor. The close proximity of a hotel has by no means helped matters.

The agency headquarter buildings and premises presented a most business-like appearance, being neat and tidy. The Indians had good gardens last year. I can safely say that substantial progress has been made in this agency during the past year.

CROOKED LAKE AGENCY.

Although I have made no special inspection of this agency in the past year, I have visited it several times on special business.

It is a pleasure for me to inform the department that there has been improvement here, and the Indians on all the reserves have had a prosperous year. The cattle were well wintered and there were practically no casualties reported.

The crop last year was a heavy one for the agency, 12,665 bushels of wheat and 8,853 bushels of oats were threshed. The area under crop this year is about the same as it was last year, but as the land is in much better condition, much of it being breaking and summer-fallow, I am looking for even better results than last year. I visited this agency a few weeks ago and found many of the Indians breaking new land and ploughing summer-fallow.

The general health of the Indians on all these reserves has been fairly good throughout the year.

I visited quite a number of houses on my trip, and was pleased to find them neat and tidy.

The Indians on all the reserves have lived well throughout the year, providing themselves with the necessities of life with their own earnings. There have been practically no rations issued, outside of those given to a few old and helpless, who will always be provided for.

Mr. Millar, the agent here, is trying his best to advance these Indians, and the result of his efforts is plainly seen.

ASSINIBOINE AGENCY.

This agency has been more or less directly under my supervision since December last. The late agent, Mr. Aspdin, being ill, was relieved of his duties in that month. He died in February, and the agency has been managed from my office up to a few weeks ago.

There has been a decided improvement in these Indians during the past year. The cattle came through the winter with practically no losses.

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The farming operations of last year were very successful, and the Indians benefited very much from the result of their work; 7,555 bushels were threshed out.

Some 17 head of cattle were sold from this agency to buyers, as well as a number of animals that were butchered for the Indians' own consumption during the winter. The cattle sold brought an average price of \$36 each.

The calf crop this year is larger than ever, and the Indians will have more cattle to sell and kill than they did last year.

The Indians of this reserve surrendered nine sections off the south end of their reserve. This was sold last February, at Sintaluta by public auction. The land was not used in any way, and could well be spared.

I made a general inspection of this agency in June, preparatory to handing the management over to Mr. W. S. Grant, who succeeds the late Mr. Aspdin.

I found the Indians hard at work breaking new land, and they had at the time of my inspection, in the neighbourhood of 200 acres broken.

The crop in places looked somewhat backward, but I am satisfied this will come on all right.

Outside of that given to a few old and infirm, the issue of rations at this agency has been stopped.

During the year a new agent's house was built in this agency. The old agency house has been turned over to the newly appointed farmer, Mr. Hassan.

This agency, in the past, was managed by an agent who acted as farmer, and a labourer. The department decided to do away with the labourer and appoint a farmer in his stead, and the result of this change has already been marked on the farming.

QU'APPELLE AGENCY.

Having direct supervision of this agency, and living at the agency headquarters, I am in constant touch with the work here.

The agency comprises eight reserves, which are very much scattered.

The Indians of the Qu'Appelle agency have just passed through the most successful year in their history, from a farming standpoint.

Last year these Indians threshed 45,010 bushels of wheat, and 28,424 bushels of oats. A great deal of this crop was grown on new breaking and summer-fallow land. Last year 1,119 acres of land were summer-fallowed, and 500 acres of new land broken. The Indians cut, stacked and hauled home over 2,600 tons of hay, harvested and threshed and hauled to market all the grain above mentioned, so the department will see that they have not been idle during the summer and fall.

The grain graded well, and most of it was shipped in car lots from the agency, a better price being obtained by selling it in this way.

The Indians sold to outside buyers 115 head of cattle, for which they obtained the highest going price. They also killed for their own use some 54 head. After deducting this number the herd shows a substantial increase for the year.

This spring the bands of this agency have broken about 800 acres, and are now engaged in summer-fallowing their land, which will be about the same as last year.

There are some 1,600 head of cattle owned by the Indians; in addition there is a government herd, which contains about 189 head. These cattle came through the past winter in excellent condition, and the Indians had a large surplus of hay over in the spring.

The colony for ex-pupils situated in this agency has made marked progress during the year. These young people are doing quite as well as white farmers. The houses, farms and surroundings are well kept, and show the result of hard work. This colony had the honour of a visit from His Excellency Earl Grey last fall, who personally visited every house and farm, and gave encouragement to these young people. His Excellency expressed surprise at the progress made by these young people of the colony. His visit has been of great assistance to those in charge.

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GENERAL REMARKS.

It will be seen by the foregoing report that the year we have just passed through has been a prosperous one for the Indians. There has been progress on nearly all the reserves. I have lived continuously with the Indians of this country for the last twenty-one years, and I can safely say that the year just past has been the most satisfactory one for them in my experience. Their cattle came through the winter with practically no losses. They had the heaviest crops since they began farming, and they realized good prices for all they produced. Their herds have increased, and the area of new land brought under cultivation has been greater than usual. The general advancement on all reserves in this inspectorate has been marked. The system of rationing working Indians has been abolished altogether, and with the exception of a few old and sick in each agency, no rations are issued. I consider this a most satisfactory state of affairs. The able-bodied Indians now understand that they must work in order to live.

I have, &c.,

W. M. GRAHAM,

Inspector of Indian Agencies.

REPORT OF SURVEYS IN PROVINCE OF SASKATCHEWAN.

DEPARTMENT OF INDIAN AFFAIRS,

OTTAWA, November 28, 1905.

FRANK PEDLEY, Esq.,
Deputy Supt. General of Indian Affairs,
Ottawa.

SIR,—I have the honour to make the following report regarding the surveys made by me during the past season.

I first surveyed nine sections which had been surrendered for sale by the Indians along the south boundary of the Assiniboine reserve, No. 76, in the province of Saskatchewan. These sections are situated about 12 miles south of the town of Sintaluta, on the main line of the Canadian Pacific railway. About one section and one-half at the east side of these sections are badly broken by sloughs and partially covered with scrub. The remaining sections are prairie, and will make excellent farming land.

Outside of the reserve and along the south boundary, nearly every section has been partially broken, and excellent crops of grain were grown last season.

On section 28 a considerable area has been cultivated by Indians and they had a fine crop.

I then surveyed into sections a portion of reserves Nos. 110 and 111, belonging to the bands of Grizzly Bears Head and Lean Man. These reserves are situated about 12 miles south of Battleford. Twenty-two and one-half sections were here surrendered for sale and subdivided.

These sections are generally prairie, somewhat stony, and are more suitable for grazing than for grain-growing. Towards the southwest part of this block there is considerable hay. The contractor for the Royal Northwest Mounted Police supply of hay at Battleford cut a considerable portion of the hay here.

I also surveyed the boundaries of the Riding Mountain reserve, as well as two roads running south through the reserve, one on each side of the Little Saskatchewan river, which had been surrendered to the municipality of Strathclair, Man.

I have, &c.,

J. K. McLEAN, D.L.S.

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REPORT OF SURVEYS IN TREATY No. 8.

DEPARTMENT OF INDIAN AFFAIRS,

OTTAWA, January 15, 1906.

FRANK PEDLEY, Esq.,
Deputy Supt. General of Indian Affairs,
Ottawa.

SIR,—I have the honour to report that in compliance with instructions received from the department, dated February 3, 1905, I left Ottawa on the 4th of the same month en route for the Peace River country, to make required surveys of certain reservations for the Indians in Treaty No. 8.

Having spent ten days at my home in Prince Albert, through the kindness of the department, I arrived in Edmonton on February 22.

It being necessary to send in all supplies, camp outfits, &c., from Edmonton, for the season's work, it was not until March 2 I was able to start out my party for Athabasca Landing en route for Lesser Slave lake, following myself in two days.

I may mention that, owing to there being no snow, I was obliged to use wagons as far as the Athabasca Landing, where we changed off for sleighs.

With the exception of being delayed about half a day on the Little Slave river by the overflow occasioned by the mild weather, the trip to the Lesser Slave lake was made without any mishap, and with expedition, arriving there on Monday, March 18.

Having given the horses two days' rest, and obtaining some information regarding the Indian location here (Lesser Slave lake), I determined to push on to the Peace River Landing, being anxious to get in my supplies for the work on the river before the roads broke up.

We pulled out of the Lesser Slave lake on March 16, and arrived at the Peace River Landing on the forenoon of Saturday, the 18th, and in the afternoon came on the English Church mission, where we remained until Monday, the 20th, when we moved up some few miles to Duncan Testawits, the headman of the Peace River Landing band.

Finding that Duncan, with some of his band, was away on a hunting expedition to the north, I sent a man with dog train to notify him that I had arrived to lay out his reservation.

While waiting, I made a traverse of the north bank of the river (Peace) between the English mission and the Big Island flat, as this was said to take in several Indian locations. I also sent my teams back to the Lesser Slave lake to bring up the wagons and supplies, as the snow was rapidly going off, and I was afraid of the roads getting bad.

My teams returned with the wagons and supplies from the Lesser Slave lake on March 29, and the headman, Duncan Testawits, returned on the following Saturday evening.

I met the headman and the Indians of the Peace River band on April 2, and after the usual talk with delays and adjustments, I at last succeeded in making the allotments I think satisfactory to them, and I hope the same will meet your approval.

The chief of the Beaver Indians of Dunvegan, Neepee, and the headman, Nataosis, came to camp while we were laying out the reserve at Old Wives lake, and desired that their allotments should be surveyed for them.

Hearing that they were laying claim to a large tract of country, and warning settlers from locating on the same, I thought it would be desirable to survey their reservations at once; and having completed the work for the Peace River Landing band, I moved to the Hay lake, and met the Beaver band of Dunvegan, and after the

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usual palaver succeeded in locating their reserve at the Hay lake, north of Dunvegan, and also a small reservation for Chief Neepee at Green Island Flat, about 6 miles below Dunvegan, on the Peace river.

From the Hay lake I moved party to Bear lake, about 25 miles north of the Peace Landing, where Louison Cardinal, No. 23, of that band, elected to take his reservation.

Having completed the location of the reservations for the Beaver Indians of Dunvegan and the Peace River Landing band, we left the Peace River Landing on Monday, May 22, under way to Lesser Slave lake and the Sturgeon lakes, and en route laid out location for Wm. McKenzie, No. 11, of the Landing band, at the Little Prairie, about 25 miles south of the Landing, on the road to Lesser Slave lake, where we arrived on May 29.

Having loaded supplies and made some repairs, we left Lesser Slave for the Sturgeon lake, arriving there June 6. We found that the chief was away, and I was obliged to send to notify him of my arrival. On June 8, the chief having returned, I met him and his councillors and told them I was sent by the department to lay off their lands, explaining the amount of land they were entitled to under the treaty. These people, as usual, have the most inflated idea of the amount of land they are entitled to, so after many meetings, and no end of explanation and talk, they finally told me they would not take any reservation. I used all possible argument that I could think of to induce them to point out their locations, offering to lay out portions for hay-land wherever they desired; but it was all of no avail. They seemed very determined, and in fact are too prosperous.

I waited at the lake (Sturgeon) for a few more days in hopes that they would come to their senses, and in the meantime made a traverse of a portion of the lake, showing the traders' locations and the mounted police quarters. Finding that there was no possibility of this band making locations, I left Sturgeon lake on June 14, and got to the Lesser Slave lake on the following Monday.

I sent word to Kenoosayoo, the chief of the Lesser Slave band, and notified the headman at the lower end of the lake that I was prepared to lay out the remaining reservation. The chief arrived in a few days, but the headman did not show up until the 30th. After the usual delays and talk, they informed me that they did not want any reservations surveyed. I am of the opinion that the fact that the Sturgeon Lake Indians refused to accept the survey had an influence over this band.

As nothing more could be done in this district, I made arrangements to take my party into Edmonton and await your instructions. As I could not take my horses and wagons, &c., without great expense and delay, I determined to sell them, and having given public notice that tenders would be received for the outfit, I sold to Messrs. Breden & Cornwall, they being the highest tenderers.

After some delay in getting a boat, I left the end of Lesser Slave lake June 8, and arrived in Edmonton on the 12th of the same month, making a very quick trip.

In accordance with the instructions received from the department, I made a re-survey of the boundaries of Alexis reserve, No. 133, and made traverse of the shore line of Lake St. Anne.

Having completed the survey at Lake St. Anne, I went on to Ponoka, and made subdivision survey of section 6, tp. 43, R. 26, W. 4 M., as per instructions of July 6.

From Ponoka I went to Morley, where I made a survey of the portion of the reserve to be exchanged and ran around the boundaries of the addition to the Stony reserve.

In compliance with instructions from the department, dated August 22, I proceeded with my assistant, to Fort Alexander, and re-ran the boundaries of the reserve there, also making subdivision and running road lines on both sides of the Winnipeg river.

Having completed the survey on November 13, I paid off the Indians, and brought the remainder of my party into Winnipeg, where we arrived on the 16th, winding up field operations for the season.

I have, &c.,

J. LESTOCK REID, D.L.S.

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PROVINCE OF ALBERTA.

BLACKFOOT AGENCY,

GLEICHEN, July 1, 1906.

FRANK PEDLEY, Esq.,
Deputy Supt. General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit the annual report of this agency, together with agricultural statistics and inventory of government property, for the year ended June 30, 1906.

Reserve.—The Blackfoot reserve, with its area of 470 square miles, is situated just south of the main line of the Canadian Pacific railway, about 50 miles east of Calgary.

The Bow river enters the reserve near the northern boundary, runs in a southeasterly direction, and leaves the reserve near the southeast corner. Crowfoot creek enters on the northern boundary and empties into the Bow river within 10 miles of its eastern boundary.

In the southwestern portion of the reserve the two Arrow-wood creeks rise, and flowing northerly also empty into the Bow river.

On both the north and south sides of the Bow are ridges of low sandy dunes.

Some scrub and small timber grows on these sandy dunes and along the river and creeks.

The banks average about 150 feet in height, in some places gradually sloping for a mile or so back from the river, but in other places they are perpendicular.

This valley consists of not only the river-bed, but at intervals of fertile valleys and plains, covered with scrub or heavy timber. The uplands on both sides of the Bow are rolling prairie broken in places by ponds and forming an ideal stock range.

Population.—The population of the reserve at the annuity payments in November last, was 803, being a decrease of 39 for the year.

Health and Sanitation.—Owing to the mild weather during last winter, the Indians enjoyed better health, but still there is always some victim of the dreaded disease consumption. Care is taken to see that the refuse of the winter is all cleared up and burned before the Indians leave their houses in the spring. Most of these Indians live in tents during the summer months, the open-air life agreeing with them much better than being housed up.

There is a hospital, containing two wards, at the north reserve. A resident doctor and two nurses are in charge. The hospital is under the auspices of the Church of England, but is open to all the Indians on the reserve. Dr. Lafferty, of Calgary, supervises the medical work of the department.

Occupations.—Stock-raising, mining and hauling coal, putting up hay, and various kinds of day labour are the chief occupations of these Indians.

The coal mine was again worked last winter by the Indians, and brought them in considerable revenue, but was not very satisfactory to their customers, owing to the fact that they seldom had a supply on hand when it was required, and too much of the slack was left in the coal.

The Indians are taking more interest in their stock each year, and with the judicious expenditure of their money, they will soon become independent of department assistance.

There were 600 calves dropped and branded to date this season, and I expect this number will be increased to over 700 head before the season is over.

There are now 24 grade stallions running with the cayuse mares, and the progeny of these sires are a great improvement over the class of horses these Indians used to

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raise when they depended on sires of their own raising. I expect that within five years these Indians will not only have a good marketable horse, but a horse well suited for their own requirements for freighting and farm work. The Indians now acknowledge that the department did them a good turn when it supplied these improved stallions.

Buildings.—During the past year I have been trying, more than before, to induce these Indians to erect a better and more sanitary class of dwellings. The difficulty has been to get them to save a sufficient sum from their earnings to pay for an improved class of houses. This stumbling-block has been partially overcome now, I am glad to be able to report, and the plan adopted is this: any Indian who is in a position to put up \$100, and who has cattle or other chattels to guarantee the payment of a loan of \$400 may now secure the loan from the band's funds, repayable, with interest, in five yearly instalments. Two members of the band, James Appekoke and Paul Little Walker, have already deposited \$100 each, and given the necessary lien on their stock to secure the loans, and the first-named Indian has a neat and commodious house already erected, and Paul Little Walker has a like house now under construction. James Appekoke's house has been inspected by a number of Indians, and they are all desirous of owning a dwelling like it, and many will, I am persuaded, just as soon as they are financially able. Several sheds and stables have been put up and improved during the year also.

Education.—The two schools, one under the auspices of the Church of England and the other, the Roman Catholic, are still in operation, and are continuing their good work.

Characteristics and Progress.—These Indians are steadily improving, both morally and financially. During the past year 32 wagons, 8 mowers, 3 horse-rakes, 12 sets of double harness and 6 saddles have been added to their working equipment. I consider these Indians are fairly well equipped, and by next spring should be in a position almost, if not entirely, to support themselves. The Indians will have enough beef animals of their own raising to supply the demand for the coming and succeeding years. Two more families have been added to the total self-support, and a number more to the semi-self-support list.

Temperance and Morality.—There has been a still further decrease in the number of liquor cases, there having been only 7 during the year. These Indians are fairly moral, according to their idea of morality.

General Remarks.—Last fall the cattle were all put through the dipping-vat, as per instructions from the Department of Agriculture, and in addition to the Indian cattle, 1,447 head were dipped for settlers, realizing \$434.17. A new branding corral has been built at the east end of the reserve, which will greatly facilitate the handling of stock on that portion of the reserve.

The Blackfeet were honoured during April by a visit from His Royal Highness Prince Arthur of Connaught. The Indians presented His Royal Highness with an address of welcome and a 'peace pipe,' and His Royal Highness made a very appropriate reply, which the Indians say 'was very strong and wise counsel.'

I have, &c.,

H. E. SIBBALD,

Indian Agent.

SESSIONAL PAPER No. 27

PROVINCE OF ALBERTA.

BLOOD AGENCY,

MACLEOD, July 10, 1906.

FRANK PEDLEY, Esq.,

Deputy Supt. General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit the annual report of this agency for the fiscal year ended June 30, 1906, together with the usual statement of agricultural and industrial statistics and inventory of government property.

Reserve.—The Blood reserve is situated between the Belly and St. Mary rivers, and from the forks of these streams runs in a southern direction for about 40 miles to within 14 miles of the international boundary. It contains an area of 540 square miles, or some 354,000 acres of splendid grazing land. The two rivers form the boundary lines on the north, east and west sides, and furnish an abundant supply of fresh, clear water. The south boundary is fenced with a line of barbed-wire fencing 15 miles long. There is no building timber upon the reserve, but the river bottoms in places have a fair growth of cotton-wood and willow, which form good shelter for cattle during cold weather. This is the largest Indian reservation in the Dominion.

Tribe.—The Blood Indians are the principal branch of the Blackfoot nation or family in the great Algonkian linguistic stock. The Blackfoot nation consists of the Blood, Blackfoot and Peigan tribes, located in Alberta, and a subdivision of the latter tribe known as the South Peigans, who are United States Indians located in Montana immediately south of the international line. These three tribes, with their allies the Gros Ventres and the Sarcees, formed the Blackfoot confederacy, a powerful combination which for a century held by force of arms against all comers an extensive territory reaching from the Missouri river north to the Red Deer, and from the Rockies east to beyond the Cypress hills. The protection of their vast territory against invasion imposed upon these Indians a life of almost constant warfare with the numerous enemies which surrounded them on all sides, and developed in the people a proud and imperious spirit, which after twenty-five years of reservation life is still the prominent characteristic of the Bloods.

Population.—The population of the reserve at the annuity payments in November last was 1,181.

Health and Sanitation.—There have been no epidemics during the year, and it may be said that the general health of the Indians has been satisfactory. The Rev. Sisters in charge of the hospital attached to the Roman Catholic mission have done good work in nursing the sick patients under their charge.

Owing to our short and mild winter, compared with that of other parts of the country, these people are enabled to live an open air life in tents for the greater portion of the year, which is very beneficial to their health. They are continually instructed to keep their surroundings clean and to burn up all refuse. Though there is a tendency on the part of the majority to neglect, while in winter quarters in their houses, such important considerations as ventilation, light and cleanliness, our efforts to improve these conditions are not without encouraging results.

Resources and Occupations.—The care and management of cattle and hay-making are the principal items of occupation, though the Indians earn considerable by freighting coal and other supplies for the agency, the Royal Northwest Mounted Police, and neighbouring ranchers. Over 3,000 tons of hay were put up by the Bloods last season for their own use and for sale, which alone represents a vast amount of labour. They supplied to the department over \$9,710 worth of beef, and their total earnings

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for the year amounted to more than \$41,000, most of which is represented by transactions originating at or passing through the agency office.

Stock.—It has long been recognized that in connection with the cattle industry lies a great hope for the future of these Indians. The grazing capabilities of their magnificent reservation, and the natural interest of the Indians in live stock encourage the belief that in the ownership of large herds of cattle will be found a solution to most of the problems with which we are now confronted in connection with their management. To this end the department has, for some years, furnished annually a number of heifers to be issued to the Indians in a special effort to make cattle-owners of such members of the tribe as can, with safety, be entrusted with the care of cattle. While this branch of our work is not yet complete, we have a very creditable showing for the expenditure incurred. This spring we have already branded over 1,300 calves, bringing the total up to more than 7,500 head of cattle owned by the Blood Indians, and the season's branding is still in progress. While striving to increase the number as rapidly as possible, careful attention has been paid to the matter of quality as is evidenced by the fact that we maintain a herd of 155 thoroughbred bulls. These are Shorthorns, Herefords and Galloways, many of which were imported from Manitoba and Ontario; but our best and cheapest bulls are those purchased by the department during the last three years at the annual public auction of thoroughbred cattle held at Calgary under the auspices of the Department of Agriculture.

Eleven stallions supplied by the department are kept on the reserve for the improvement of the Indian horses.

Buildings and Implements.—While an improvement in the dwelling-houses of the Indians is apparent, the high price of lumber in this district makes progress in that direction slow.

A few acres of additional land for gardens have been fenced by the Indians this year. The fencing in of large tracts by individual Indians is discouraged, as having a tendency to destroy the grazing value of the reservation, but the breaking and fencing of land for agricultural purposes is encouraged and assisted in every way.

To their already large working equipment the Indians added during the year, 30 wagons, 1 plough, 6 mowers, 4 rakes, 20 sets of harness and a large number of saddles.

Education and Religion.—Two boarding schools are supported by the department, in connection with this agency, one under the auspices of the Roman Catholic Church, and the other of the Church of England, with an aggregate attendance of 70 pupils. From these schools and from the reserve direct are obtained recruits for the industrial schools at Calgary and High River, which contain at present 37 pupils from this reservation.

Temperance and Morality.—The greatest evil we have to contend with in this connection is the illegal traffic in liquor to Indians, which in late years has grown to such an extent as to become a very serious matter. Special measures have of late been adopted by the department, with a view to checking this disgraceful traffic, including the employment of two Indian constables under the agent's control, and a provision to reward the informers in cases where convicted persons serve imprisonment in default of fine, thus correcting a weakness found in the operation of the Indian Act, which makes the reward dependent upon payment of the fine. These changes have been so beneficial that during the last twelve months a very large number of persons have been convicted for supplying intoxicants to Indians of this reserve.

The complete stamping out of this liquor evil will no doubt be a very difficult, if not impossible, matter, but we have every reason to believe that the permanent adoption of the methods now in use will make the illicit dealers' occupation a much more dangerous one, and drunken Indians much less common, than has been the case for some years past. In fact a marked improvement has already been noticed.

Much depends upon the attitude of magistrates towards this offence. Some of them do not seem to realize the seriousness of it, judging from the proportion of minimum sentences imposed.

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Progress.—In the direction of self-support a substantial beginning has been made. A considerable number of the Indians have ceased to draw free beef rations from the department, but consume beef entirely of their own raising; while others with smaller herds contribute in part to their support. Owing to this self-sustenance, a reduction of 196,000 pounds of beef has been effected in the free food issues during the last two years.

I have, &c.,

R. N. WILSON,

Indian Agent.

PROVINCE OF ALBERTA,

EDMONTON AGENCY,

EDMONTON, August 9, 1906.

FRANK PEDLEY, Esq.,

Deputy Supt. General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my annual report on this agency for the fiscal year ended June 30, 1906, together with statistical return and an inventory of the government property under my charge at that date.

ENOCH'S BAND, No. 135.

Reserve.—The reserve of Enoch's band is situated about 8 miles west of Edmonton, and contains an area of 19,520 acres of well watered and well timbered land. The soil is rich, the location convenient to railroads and good markets, and the conditions generally prevailing make this a very desirable place for mixed farming or stock-raising.

Population.—The number paid at the last annual enumeration was 111.

Health and Sanitation.—Scrofulous and tubercular affections are very rife in the band, few of the members being exempt from the taint of one or the other of these maladies. There have been no outbreaks of epidemic diseases during the year. They carry out the usual sanitary measures of burning refuse and whitewashing their houses. They have more commodious and better lighted and ventilated houses, which will have a beneficial effect.

Dr. Tierney, under an annual contract with the department, makes regular visits once in every two months to this and other reserves in the agency, and treats such as may present themselves in the intervals at his office, besides attending any emergency calls at the reserves.

Occupations.—Mixed farming and the conversion of the natural products of the reserve, along with hunting and trapping, are the chief employments. The rapid development of the country calls many of them to the saw-mills, the railway camps and elsewhere, where employment is plentiful and wages good.

Buildings.—The band owns a saw-mill, a planer and shingle-machine, and the facility with which, through these means, they can secure the more costly part of building materials is working some improvement in the character of their buildings.

Stock.—Owing to the unusually mild winter, cattle came through well, and the spring increase is satisfactory. There is improvement in the management, plenty of hay having been put up and unauthorized killing or disposing of cattle having decreased. The quality of the herd has improved through the introduction and maintenance of thoroughbred sires. Some fatalities occurred through cattle eating the water parsnip in the early spring. As soon as the cause of death was ascertained and

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the locality infested discovered, the place was fenced in, and there have been no cases since.

The band purchased 24 brood mares and a suitable stallion from their own funds, and turned them on the reserve as a start in horse-raising, which should be successful.

Farm Implements.—The band is fully equipped in this respect.

Education.—While there is no day school on the reserve, the boarding schools at St. Albert and Hobbema, and the industrial school at Red Deer are available and afford better facilities than could be provided at home. The parents are generally willing to send all of suitable age.

Characteristics and Progress.—These Indians take no account of the future, and apparently cherish no ambitions. They would be more distressed by being unable to devour what they earn with the day that brought it than they would be if their wages fell short of adequately supplying their necessities. In spite of these characteristics they are doing fairly well. They are doing as much farming as in the past, are giving better attention to their stock, and, as has been said elsewhere in this report, they have representatives doing white men's work and earning white men's wages in most lines of unskilled labour.

Temperance and Morality.—Many of these Indians are addicted to the use of intoxicants, but the habit is not spreading. In other respects their morality compares favourably with that of bands similarly situated.

MICHEL'S BAND, No. 132.

Reserve.—This band's reserve lies about 7 miles west of the town of St. Albert, and has an area of 17,934·25 acres. The land is well adapted for their pursuit of mixed farming, being well watered, having plenty of natural meadow for pasture and hay-supply, and carrying sufficient timber for their requirements. The soil is good and markets are convenient.

Population.—The band numbered 94 persons at the annuity payments.

Health and Sanitation.—Michel's band is affected by the plague of consumption. Their houses are kept clean and their surroundings are sanitary. There are no epidemic visitations to record for the year. They have the regular visit of the doctor every two months.

Occupations.—A number of these Indians are hunters and trappers, and are seldom on the reserve except to draw their annuities. The rest of the band are chiefly practical farmers, engaging, at times, in the usual side ventures of freighting and working at what may offer.

Buildings.—Most of those residing on the reserve have good dwellings and fair stables.

Farm Implements.—The equipment in this respect has been inadequate, but the remedy is now at hand, the returns from the sale of their lands being equal to fully supplying their requirements.

Education.—There is no day school on the reserve, nor is there any need for one, as the St. Albert boarding school is in the vicinity and offers advantages a day school cannot supply. The parents are anxious to have the children educated.

Characteristics and Progress.—These people have led a settled, civilized life so long that one might fairly include them in a description of the settlers of the district, and say that Michel's is a thrifty, well-ordered, well-to-do community, living in a good agricultural neighbourhood, but holding somewhat more real estate than they can well manage, and, recognizing this, have just arranged to put the surplus on the market.

Temperance and Morality.—They have now, perhaps, reached a stage where they recognize some moral responsibility to practise these virtues, and its existence may be observed in their conduct, though their standards are not so exacting as those of the older civilizations. For Indians, we may say they are sober and moral.

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ALEXANDER'S BAND, No. 134.

Reserve.—The reserve set apart for this band is about 4 miles north of Michel's, and contains 26,240 acres. Much of it consists of fine, open, undulating prairie, containing fine hay and bottom lands. The rest is high, rolling country timbered with poplar and fir. They have surrendered to the Crown, to be sold for their benefit, a strip 2 miles in depth by the width of the reserve, some 13 sections, of extra good land, which is being surveyed at present.

Population.—At the last enumeration there were 177 Indians in this band.

Health and Sanitation.—No epidemic prevailed during the year, and the health of the band, apart from scrofulous diseases, was fair. Accumulated refuse was burned in the spring and houses whitewashed. The doctor made his regular visits and attended special calls.

Occupations.—Their chief resource is hunting and trapping, at which they are successful. They do some fishing. They put up enough hay to winter their cattle, and arrange for some of their number to feed the stock in winter. Some take out saw-logs and haul them to their own mill, where they saw them in the spring.

Buildings.—Although they own and operate a saw-mill, very little improvement is to be seen in their buildings, neither houses nor stables being what they might and should be, considering their opportunities.

Stock.—They make enough hay to keep their cattle, and arrange to have them fed in winter. Unauthorized killing is still too common. Although the winter was mild, the farmer reports many casualties from slipping on the ice, and the increase of calves this year diminished from this cause.

Education.—There is no day school on the reserve, but a few children are sent to the boarding schools.

Farm Implements.—As practically no farming is now done here, they find what implements they have sufficient.

Characteristics and Progress.—Being chiefly hunters and fishermen, this band may be said to be successful rather than progressive. They made well from the sale of their fur this year, and from the proceeds bought a quantity of household supplies, such as stoves, bedsteads, lamps and the like, besides living well.

Temperance and Morality.—These Indians are sadly addicted to the use of intoxicants, and it is a fair inference that their morals in other respects occupy no higher plane than their sobriety.

JOSEPH'S BAND, No. 133.

Reserve.—The reserve of Joseph's band is situated on the shore of Lac Ste. Anne, near a village of the same name. It has an area of 14,720 acres, three-fourths of which is covered with spruce and poplar timber, the remainder being prairie, hay, and bottom lands. The soil is suitable for agricultural purposes.

Population.—At the last enumeration the band had 147 members.

Health and Sanitation.—Living out of doors and moving from place to place, their health is good, as one would expect. The doctor visits the reserve, but his services are seldom in request.

Occupations.—They are chiefly hunters and trappers, preferring these pursuits to fishing. Lac Ste. Anne abounds with whitefish of excellent quality, but in recent years the waters are infested with a worm that destroys the nets. The Indians put up hay in summer for their cattle, and cultivate small gardens, but make no pretense to farm.

Buildings.—Following the occupations they do, their houses are what one would expect, temporary shelters, and their stables, similar.

Stock.—Their cattle are increasing in numbers and improving in quality. They are well provided for winter sustenance, and well cared for in cold weather.

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Education.—The frequent and prolonged absences of the families from the reserve rendered any attempt at education futile, and so the day school, at one time conducted here, was closed more than a year ago.

Characteristics and Progress.—In their chosen avocations they are successful to a degree that leaves them practically self-supporting. Trifling assistance, for those who put up hay in summer and for the women who feed the cattle in winter, is accepted rather than sought for.

Temperance and Morality.—The placing of a police detachment here has had salutary influences on the drinking habits of the band, and the improvement, though due to pressure from without, it still improvement. I have heard no complaints of immorality.

PAUL'S BAND, NO. 133A.

Reserve.—This band occupies a reserve at White Whale lake, about 20 miles west of the agency headquarters. It contains 20,920 acres, much of it suitable for agriculture. Three-fourths of the area is covered with timber, chiefly poplar. There are extensive beds of marl, with all the adjuncts for cement manufacture so conveniently assembled that the day is not distant when extensive works may be established here.

Population.—According to the last enumeration there were 164 members in the band.

Health and Sanitation.—This band suffers from the usual tubercular maladies. They have been free from any epidemic during the year. Many of them have built and are occupying new and more sanitary houses, and it is hoped the result may be salutary. Here, as at the other reserves, the doctor visits regularly.

Occupations.—For the past two years these Indians have successfully followed the chase or engaged in fishing, leaving farming in abeyance awaiting better marketing facilities. Now that the railway is due to reach them this summer, there is a revival of interest in farming, and at their own solicitation, and from their own funds, a considerable outfit of work stock and agricultural implements is being purchased for them.

Buildings.—Expectations in regard to improvement in their buildings have been extensively realized this year. New houses of a good type were built, and some were enlarged and improved. New stables, also, were built, and further building of both houses and stables was contemplated for the coming year, but the absence of sleighing, and the inability of the sawyer to serve them, has caused postponement for a time.

Stock.—The cattle came out of the winter in good condition, and the increase in calves was very encouraging.

Farm Implements.—The supply of implements has been equal to the demand, and provision is made to meet any further needs as they arise.

Education.—The day school was closed a year ago for want of attendance and lack of interest. The parents do not seem averse to their going to the industrial school at Red Deer, and they are taken there when of proper age.

Characteristics and Progress.—The band, this year, enjoyed prosperity, and evinced progress. In both fur and fish the catch was good and the prices were high. From their earnings they bought six stoves with the necessary pipes, twenty lamps and some household utensils toward furnishing the ten new houses they built. From the same source they bought eleven bob-sleighs, three driving sleighs and five sets of team harness.

Temperance and Morality.—I am sorry to have to say that the same advance is not evident in these virtues as in other directions. Great vigilance is exercised in their oversight, and the results are becoming manifest. In other aspects of morality they stand on a level with similarly situated Indians.

I have, &c.,

JAS. GIBBONS,
Indian Agent.

SESSIONAL PAPER No. 27

PROVINCE OF ALBERTA,

HOBBEMA AGENCY,

PONOKA, July 1, 1906.

FRANK PEDLEY, Esq.,
Deputy Supt. General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my annual report of the affairs and conditions of this agency; and likewise to present herewith my agricultural and industrial statistical statement, together with an inventory of government property under my care.

Reserves.—On the left bank of the Battle river, about 10 miles down from Ponoka, and 5 miles due south of Hobbema siding, on the Calgary and Edmonton railway, is to be found Hobbema agency headquarters. This agency comprises the following reserves, and as these reserves lie contiguous to each other, they form practically one large reserve, with an area of nearly 100,000 acres.

SAMSON'S RESERVE, NO. 137.

About a quarter of a mile south of Hobbema siding, is the north boundary line of Samson's reserve. This reserve extends easterly to the Battle river, southerly about 4 miles, and westerly about 3 miles, and comprises 39,360 acres.

ERMINESKIN'S RESERVE, NO. 138.

This reserve has the north boundary line of Samson's reserve for its southern boundary, and extends northerly to the 46th township line, and has an area equal to Samson's, that is, it covers 39,360 acres.

Louis Bull's reserve is included in Ermineskin's.

THE MONTANA OR BOBTAIL RESERVE, NO. 139.

This reserve lies to the south of Samson's and extends southerly to a parallel line which brings the southwest corner to within 3 miles of the town of Ponoka. This reserve comprises 20,160 acres; to be exact, the total area of the whole of the reserve is 98,880 acres.

The Calgary and Edmonton railway runs through the reserve diagonally for 15 miles.

REMARKS APPLYING TO ALL RESERVES.

Topography.—The surface of this large block consists of rolling prairie, swamps and lakes, with a small quantity of timber of sufficient size for cutting into lumber, and for building purposes.

At the northwest and southeast corners are extensive hay meadows which become more and more extensive according to the dryness of the summer season. These meadows afford a sure source for winter feed for all the stock possessed on the whole of the reserves.

Tribe.—Nearly all of these Indians are Crees.

Population.—At the annual payment of annuities there was a total of 691 souls.

Health and Sanitation.—The general health of the Indians has been fairly good. During the winter small-pox was found to exist near Buffalo Lake, a white settlement about 30 miles distant; so the Indians were confined to their reserves for a time, and fortunately none were taken down with the disease.

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The usual annual cleaning up and burning of refuse took place in April; since which time the summer custom of living in tents has been followed with the usual excellent results. The lime-washing of all the buildings is an annual housecleaning that takes place in October before leaving camp life for their winter residences.

Dr. Robertson of Wetaskiwin is the medical officer in charge, and visits the reserves whenever his services are required.

Occupations.—The occupation and sources of income are land-clearing for settlers, log-driving for lumbermen, fishing in the lakes and rivers, hunting for furs, shooting of wild fowl and other game, farming, and cattle-raising. The full particulars from all these sources of income will be found in the agricultural and industrial statistics accompanying this report.

With the exception of the old and sick, the cripples and blind, and some mentally deformed, for whom the department provides by regular weekly rations, these Indians, comprising two-thirds of the bands, are self-supporting; when I shall have succeeded in making this self-support to be based on the firm footing of land cultivation and cattle-raising, then the two-thirds will be independent.

But herein lies the nut that must be cracked to obtain the kernel, the fruit of all our endeavours.

Cattle.—The cattle belonging to the Indians and under the care of this agency number 968. To improve the herd the department has provided 24 pedigreed bulls. It now remains for the Indian to do his part, and this he is gradually, with our help, learning to observe and to do. There are a few excellent examples of success amongst them.

Characteristics and Progress.—The short time I have been at this agency has not permitted me to be in close touch and understanding with all these Indians, but my previous experience with other Indians so far serves and is of great value in planning for them and answering the many objections and suggestions that are daily offered me. I am, however, of opinion that here, as elsewhere, the real progress of the Indian depends on his adherence to the soil and its cultivation, and to the raising of cattle and other stock, its natural adjunct. To this end I am bending all my energies. I am directing attention from the lines of industries the white man calls sport, as shooting, fishing and hunting, and leading the Indian to the sure and safe lines of mixed farming, which all experience shows to be the foundation of prosperity for every people and kindred. The end in view I may not accomplish, but it shall not prevent me trying.

A peculiar characteristic of an Indian is that one is never sure of him. He may be an industrious promising Indian to-day, and to-morrow it may be a thing of the past. Something happened, not very much, but he is gone; he has taken his horses, his wife and family. The rest of his property he leaves to take care of itself. We had such a case during the year. It was an Indian of the Montana band on the Bobtail reserve. It seemed he wanted a cow-skin*that was denied him for the simple reason that it had been given to some one else. Up his hands went, and so did he for six months. He is now back again working away, apparently all right. Another of the same Montana band, Kap-pi-to-quay-hat, No. 45, is an example of progress that is satisfactory.

It is but a few years since this band of Indians returned from Montana, where they had been since the troublous times of 1885. The band was settled on the Bobtail reserve, No. 139. Kap-pi-to-quay-hat, like the rest of them, was very poor. With poverty's inconvenience he built a shack for the defence of his family against the winter's blast. The department assisted him, as it did the others, and the next year a little headway was made. A cow was also given him, and little helps now and again in the way of clothing, garden seeds, and repairs to implements were obtained at this agency. To-day Kap-pi-to-quay-hat, or as he likes to be called 'The Little Cattle Man' owns 11 head of horses, 13 head of cattle, a wagon, 2 sets of harness, a mower and rake; he puts up a quantity of hay (100 tons) and sells the half. This spring he

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put in crop 4 acres of wheat and 2 of oats. I think I shall be able this summer to get him to break 10 acres of prairie.

Education.—There is one Roman Catholic boarding school, and two Methodist day schools on the reserves. The Roman Catholic boarding school is on the Ermineskin reserve, and near to the Hobbema siding. It provides a home and education, including religious training, sufficient for all the children of Roman Catholic parents so desiring it. The children are certainly doing well, and progress that is satisfactory is written large everywhere, as the result of the watchful care and interest of those in charge of this renowned institute or boarding school. To visit this school and see the constant progress is always a very pleasant duty. One Methodist day school is on the Samson reserve. The other is on the Louis Bull reserve. To expect similar results in the day schools that we have in the boarding school would not be fair. Irregular attendance, which is the bane of all day schools, is the source of the lack of progress here. The children show good intelligence, but the home influence is too constant for the periodic and erratic attendance, teaching and influence, of a day school to counteract. Given the same causes and conditions, no doubt the results would be equally as favourable as with the boarding school.

Temperance and Morality.—To be able to give the progress of these Indians in the line of morality and temperance needs a longer acquaintance than I have had with them. I notice that several have been brought up and punished during the year for violation of the Indian Act by having in their possession intoxicants. There is, however, a good start made, in that Chief Samson, of Samson's reserve, and Chief Ermineskin, of Ermineskin's reserve, are confirmed total abstainers; and use their best influence with the members of their respective bands for the keeping of the law.

This is an excellent beginning for temperance. On the other hand, the loving cup which cheers and inebriates is a little delightful to an Indian, and he will go a long way, and do many objectionable things to be able to gratify the cravings which have such a powerful hold upon him. The strong arm of the law and the long arm of the police he certainly needs to protect him from himself, and also from those who would ruin him to obtain his money. I have found great help in carrying out the law from the vigilance and activity of the Royal Northwest Mounted Police.

I have, &c.,

GEO. G. MANN,

Indian Agent.

PROVINCE OF ALBERTA,

PEIGAN AGENCY,

MACLEOD, June 30, 1906.

FRANK PEDLEY, Esq.,

Deputy Supt. General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit the annual report of this agency for the fiscal year ended June 30, 1906, together with the usual statement of agricultural and industrial statistics and inventory of government property.

Reserve.—The Peigan reserve is situated on the Old Man river, west of Macleod. Its form is almost square, and its area $181\frac{1}{2}$ square miles, or more than 116,000 acres. In addition to the reserve proper, the Indians have, in the Porcupine hills, a timber limit containing $11\frac{1}{2}$ square miles. The Crow's Nest Pass railway passes through the reserve from northeast to southwest corners, there being 15 miles of track and 3 sidings; the first west of Macleod is the Peigan siding, where there is a substantial sec-

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tion-house and a good stock-yard with every facility for shipping. Chokio is the next, then comes Brockett; this siding is situated on the southwest corner of the reserve, and as quite a large trade is done at this point by some of the Pincher Creek merchants in baled hay and oats, they have erected a large warehouse for storage and handling the same.

This reserve is composed of undulating prairie and untimbered hills, all being suitable for grazing purposes, with a considerable area of good farming land.

Favourably situated among the hills are several large springs of good water, to which the range stock has easy access throughout the year. The Old Man river, which flows through the reserve, is thickly timbered for a short distance back on both sides with small cotton-wood, red willow, saskatoon and red cherry; this affords good shelter for stock during cold weather and severe storms, and the Beaver creek, which enters from the north, supplies abundance of water during the open season.

Population.—The population of the reserve is 493. Details in connection with this subject are shown in the tabular statement.

Health and Sanitation.—The health of the Indians during the past year has been satisfactory. There has been an absence of any infectious diseases. Those cases with fatal results have, in the larger degree, been caused by tubercular disease. In spring there is a general cleaning up around their houses; the rubbish burned, and during the summer they are all under canvas.

Occupations.—The cattle and horse industries are the principal occupation, as the natural facilities, and more particularly the soil, are better adapted for stock than grain, and these Indians take more kindly to this work than farming, although seeing so much farming being done by white settlers surrounding the reserve has created a mild excitement amongst them, and a wish to do likewise. We have about 30 acres of fall wheat, and between 80 and 90 acres of oats, and from present appearances we are likely to get a good return. We have also broken about 50 acres this spring, which will be disked and prepared ready to sow fall wheat on. The past year these Indians, particularly those located in the vicinity of Brockett—have earned considerable money working for white settlers, harvesting, threshing, building fences, stables, corrals, harrowing, disking, and in two or three cases, breaking new land. Besides this they did a little farming for themselves and threshed out 1,300 bushels of oats, which averaged 40 pounds to the bushel.

Progress.—I can safely say that a noticeable advance along all lines has been going on for the past year, as follows: we have built 10 miles of fencing, erected a number of good substantial dwelling-houses quite as good, if not better, than that of the average white settler surrounding us; broke 80 acres of new land, on a portion of which we harvested our initial crop of oats, some 1,300 bushels, and we have 30 acres under crop with fall wheat; purchased 20 saddles, 8 wagons, 8 sets of harness, 5 mowers, 4 rakes, and many other small tools. At the same time a gradual reduction in free rations has been going on; for instance the total reduction for the past two years and six months was 110,849 pounds of beef and 51,000 pounds of flour. This represents a reduction in money value of gratuitous food during this period of between \$5,000 and \$9,000. We have 12 souls on the self-supporting list; and on the semi self-supporting list during the year there were 80. Their beef sales amounted to \$4,619.93; sales from horses, \$2,000; earnings in wages and lumber from saw-mill are equivalent to \$2,500.

Stock.—The stock on the reserve and surrounding district did not winter as well as the previous year; the losses amongst the cattle of both white settlers and Indians being above the average. The calf-crop, however, on reserves is very good.

Education.—There are two boarding schools in connection with the reserve, one under the auspices of the Anglican Church, the other in the hands of the Roman Catholic Church. The aggregate number of Indian children attending these schools is 62.

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Temperance and Morality.—These Indians are moral in their habits; and I am glad to say that there are fewer cases of intemperance each succeeding year.

I have, &c.,

J. H. GOODERHAM,

Indian Agent.

PROVINCE OF ALBERTA,

SADDLE LAKE AGENCY,

SADDLE LAKE, July, 1906.

FRANK PEDLEY, Esq.,

Deputy Supt. General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my annual report on the affairs of this agency for the fiscal year ended June 30, 1906, with statistical statement and inventory of government property.

SADDLE LAKE BAND, No. 125.

Reserve.—This reserve is situated in townships 57 and 58, ranges 10, 11, 12 and 13, west of the 4th meridian, and including Blue Quill's reserve, No. 127, adjoining it to the west, has an area of 82,560 acres. The north and west is rolling prairie-land, while to the south and east it is comparatively level. Poplar groves abound throughout the whole reserve, with a few spruce clumps along Saddle Lake creek, which runs through the reserve from north to south. The greater part of the reserve is suitable for farming, and as an abundance of hay is obtainable, it is also well adapted for stock-raising.

Population.—The population, including Blue Quill's band, No. 127, numbers 257.

Health and Sanitation.—The general health of this band has been good during the year. The usual sanitary precautions, with reference to cleaning around buildings and burning refuse, were carefully carried out.

Resources and Occupations.—The chief occupations followed by these Indians are farming and stock-raising. They also derive considerable revenue from hunting, fishing, freighting and working for settlers in the vicinity of the reserve.

Buildings.—A few new houses have been erected, and some of the old ones improved.

Stock and Farm Implements.—The cattle wintered well, there being a large surplus of hay left over this spring. This band is fairly well supplied with farm implements and machinery.

Education.—A boarding school is situated on Blue Quill's portion of the reserve, and is under the guidance of the Roman Catholic Church. Good order and discipline is maintained. Good progress has been made by the pupils during the year. A day school is situated on the eastern or Saddle Lake portion of the reserve, and is under the auspices of the Methodist Church. This school has been closed for two years, but was opened again last October. Very satisfactory progress has been made by the pupils since the school has been opened, and a marked interest is manifested by the parents in the education of their children.

Characteristics and Progress.—The Indians of this reserve, speaking as a whole, are intelligent and industrious, and although there are a number of drones, some progress continues to be made. The majority of the younger people speak, read and write English, and their dress and general appearance is very creditable.

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Temperance and Morality.—No case of intemperance was reported during the year. The general morality of these Indians is good.

JAMES SEENUM'S BAND, NO. 128.

Reserve.—This reserve is situated north of Saddle lake, in townships 61 and 62, ranges 12 and 13, west of the 4th meridian, and occupies an area of 11,200 acres. It runs north and south for about 12 miles, on the eastern shores of Whitefish and Goodfish lakes. It is undulating, and thickly wooded throughout, with poplar and some spruce. The land is stony in parts, but what little soil is available is well adapted for farming, and good crops of both grain and roots have been raised in favourable seasons. Both of the lakes mentioned are well stocked with whitefish and jackfish.

Population.—The population of this reserve is 335.

Health and Sanitation.—The general health of these Indians has been good. The usual sanitary precautions, such as cleaning around premises, and burning up refuse, were carefully carried out.

Resources and Occupations.—Farming and stock-raising are followed by these people, but chiefly the latter. A fair income is also derived from hunting, trapping and fishing. A few of the Indians got employment with survey parties last summer, and others worked for the Hudson's Bay Company on the Athabasca river during navigation. Forty-five thousand feet of lumber was cut and sawn by these Indians last summer.

Buildings.—A few new buildings were erected during the year.

Stock and Farm Implements.—The cattle wintered well. There was a surplus of hay left over this spring. This reserve is well supplied with farm implements and machinery.

Education.—There are two day schools on this reserve, one at Goodfish Lake and one at Whitefish Lake. Both schools are under the management of the Methodist Church. The attendance at each throughout the year has been good, and very satisfactory progress has been made by the pupils.

Characteristics and Progress.—These Indians are industrious and law-abiding, and, despite the unfavourable location of their reserve, are making some progress.

LAC LA BICHE BAND, NO. 129.

This band numbers 9 persons.

The people are half-breeds, and make their living by hunting, trapping, fishing and freighting.

CHIPEWYAN BAND, NO. 130.

This band lives in the vicinity of Heart lake, about 100 miles north of Saddle lake. They number 81 persons. Trapping, hunting and fishing are the sources from which they derive a living.

BEAVER LAKE BAND, NO. 131.

These Indians live in the neighbourhood of Beaver lake, a short distance to the east of Lac la Biche. They number 105 persons. They make a living by trapping, hunting, fishing and freighting for the Hudson's Bay Company.

GENERAL REMARKS.

A new dwelling-house and horse-stable have been built for the farming instructor at Whitefish Lake.

Several changes were made in the staff of this agency during the year. Mr. Geo. G. Mann, the Indian agent, was transferred to the Hobbema agency, on May 31, 1906.

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on which date I took charge of the agency, having been appointed Indian agent in his place. Miss B. E. Mann, the agency clerk, resigned her position here. Mr. T. Niblock has been appointed farming instructor in my place, and Mr. P. Erasmus has been appointed assistant to the farming instructor at Whitefish Lake.

I have, &c.,

J. BATTY,

Indian Agent.

PROVINCE OF ALBERTA,

SARCEE AGENCY.

CALGARY, July 30, 1906.

FRANK PEDLEY, Esq.,

Deputy Supt. General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my annual report for the year ended June 30, 1906, together with a tabulated statement of statistics and a list of government property under my charge.

Reserve.—The Sarcee reserve is situated southwest of the city of Calgary, and generally speaking between the Fish creek and Elbow river. Its nearest point is about 5 miles from that city. It comprises township 23, ranges 2, 3 and 4, west of the 5th meridian, and contains an area of 69,120 acres. Besides the Elbow river and Fish creek already mentioned, the reserve is intersected at many points with small streams, and open springs are also to be found all the year round; this with its rich pasturage and good shelter combines to make it a stock range second to none in the province.

Population.—The population is 205.

Health and Sanitation.—The general health of this band has been good. There have been a few deaths from tuberculosis. Keeping premises clean, the burning of refuse around dwellings, and isolation of persons suffering from contagious diseases have been carefully attended to.

Occupations.—The majority of these Indians are occupied throughout the year in much the same way as the white ranchers. Stock-raising is the principal industry, besides many still raise grain, potatoes, turnips, and nearly every Indian has his garden.

The new industry of boring for gas and petroleum on the reserve by the Calgary Natural Gas Company gives the Indians considerable employment, and many of them are highly interested. The Sarcees are by nature a shrewd lot of Indians, and ever on the look-out to make a dollar, and if this company makes this venture a success, of course they are expecting a good big share in the profits.

Buildings.—Several new houses, stables and cattle sheds have been erected during the year.

Stock.—This industry is the one of all others that the Indian has to look forward to to help him out in making a living, and he should receive every encouragement in this direction. The Indians take more interest in this industry than in any other, some of them are doing well and making, as can be seen already, a success of it.

Farm Implements.—They now supply all their own implements and keep adding to the list each year as they require them to replace those used up and broken.

Education.—There is one boarding school on this reserve, situated near the agency headquarters. It is under the auspices of the Church of England. During the year satisfactory progress has been made.

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Characteristics and Progress.—I am glad to report that the Sarcees are very much interested in their little bands of cattle and horses, and many are anxious to get along. They are progressive and self-reliant, and make excellent stockmen, and during the 'round up' seasons many of the Sarcees are employed by the neighbouring ranchers as riders.

As time wears on, I hope the Indians will have enough stock of their own to keep them busy on their own range.

Temperance and Morality.—There were, during the year, a few cases of intemperance to report, but generally speaking, the Sarcees are improving in this direction.

I have, &c.,

A. J. McNEILL,

Indian Agent.

PROVINCE OF ALBERTA,

STONY RESERVE,

MORLEY, June 30, 1906.

FRANK PEDLEY, Esq.,

Deputy Supt. General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my annual report for the year ending this day, together with tabular statement and inventory of government property.

Reserve.—The Stony reserve, comprising 69,720 acres, is situated in the foot-hills of the Rocky mountains, about 40 miles west of Calgary on the line of the Canadian Pacific railway, and is divided by the Bow river; Peter Wesley's band residing on the north. Chiniquay's and Moses Bearspaw's on the south side of the river; Morley station is about half a mile from the agency headquarters. With the exception of the southeast corner, nearly all the reserve is gravelly and hilly, a great portion being covered with timber.

Tribe.—These Indians are Stonies, a branch of the Sioux nation.

Vital Statistics.—The population consists of 152 men, 181 women and 327 children under the age of twenty years, making the total 660 souls. There were 27 births and 14 deaths, and 5 were absent, making an increase of 8 souls.

Health and Sanitation.—The health of the Indians has been fairly good on the whole, of course there are many cases of scrofula and consumption, some of whom succumbed to those diseases during this spring. Grippe was prevalent, and one case of small-pox, but with every precaution as to isolation, and every Indian's house being whitewashed inside and out, there were no more cases. Dr. Lafferty and his assistants made their usual visits to the reserves and boarding schools. All sanitary precautions have been strictly observed, and all garbage burnt during the spring.

Resources and Occupations.—These Indians raise cattle and horses and cut and deliver logs to saw-mill (very little snow during last winter to make a good showing of this). They put firewood, posts and rails on cars at Morley station, haul wood to lime kilns at Kananaskis, and labour outside at different points: from the wood industries they have earned about \$6,740, all of which was paid them in cash. Their total earnings from all sources amount to \$21,848.

Buildings.—Some houses have been built and many re-built and repaired, as well as stables, most are now fairly comfortable and clean.

Stock.—Stock-raising is one of the principal industries on this reserve, the Indians are taking more interest in their cattle, and in improving the breed of horses. The self-support system is working well, and a great many are supplying their own beef.

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Implements.—The Indians purchased, during the year, out of their earnings, 7 wagons, 3 bob-sleighs, 2 mowers and rakes, and 5 sets of double working harness.

Education.—There is a boarding school on the outskirts of the reserve, having an average attendance of 34 pupils. This is below last year, and is accounted for by deaths, and change of management; but it is hoped there will soon be a better showing.

Religion.—The Methodist Church claims that all the Indians are of its faith. A great many do attend the services of the church.

Characteristics.—The Indians follow the advice of officials over them much more than formerly, seeing such advice is for their advancement.

Progress.—The Indians are certainly progressing; it may be slowly, but the fact that they are more anxious to work and earn more money is sufficiently proved by the amount of their earnings, which is spent judiciously.

Temperance and Morality.—The Indians are temperate, no cases of intemperance coming to my notice, and the fact that they are so far away from any town is a great salvation to them.

Their morals are fairly good. The exceptional cases are few, but these I am sorry to say cannot be punished for deserting their wives and families.

I have, &c.,

T. J. FLEETHAM,

Indian Agent.

PROVINCE OF ALBERTA,

ALBERTA INSPECTORATE,

GLEICHEN, July 5, 1906.

FRANK PEDLEY, Esq.,

Deputy Supt. General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my annual report on the inspection of Indian agencies and reserves for the fiscal year ended June 30, 1906.

EDMONTON AGENCY.

This agency includes the Enoch's, Michel's, Alexander's, Joseph's and Paul's reserves. The headquarters of the agency are located on Enoch's reserve, which is about 12 miles westerly from Edmonton, and in the locality known as the Stony plain.

The inspection was made during the months of September and October.

The staff comprises: Messrs. James Gibbons, agent; Wm. Black, clerk; John Foley, interpreter and general labourer; D. Bard, farmer at Alexander's reserve; A. E. Pattison, farmer at Paul's reserve, and Dr. Tierney, medical officer.

The agency buildings consist of a dwelling for the agent, dwelling for the clerk, dwelling for the interpreter, office, two storehouses, stables, ration-house, saw-mill buildings and a couple of sheds for the storage of vehicles and implements.

The house in use by the agent is partially solid brick and partially log with brick veneer. The foundation walls of this house are faulty, and require improving at an early date to save the main walls from becoming deranged. A few changes in the interior and a furnace would considerably improve this building, too.

The clerk occupies a small frame cottage. It requires enlarging, as there is only one bed-chamber therein, and a few minor repairs, also.

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The frame house in which the interpreter resides is in good condition, but it requires painting. This house was erected about five years ago for the use of a farmer. As no farmer is employed here now, the interpreter was allowed to use it in lieu of an old log, leaky and dilapidated building in which he and previously employed interpreters had resided for about twenty years.

The horse-stable is a frame building, and, if it were painted on the exterior, it would then be in first-class condition.

The saw-mill building is a much larger structure than is required to hold the saw and grist mill machinery. It is in a fair state of repair.

The office, storehouse and sheds are old, dilapidated buildings, and they should be torn down just as soon as new structures are erected to take their place. I was pleased when I was recently informed that a new combined office and storehouse was to be erected this season.

A new picket fence has been erected partially around the inclosure in which the office, storehouse and agent's house stand. This fence has considerably improved the appearance of these agency quarters.

I found the office books and records neatly and accurately kept.

ENOCH'S BAND.

Since I last inspected this reserve a post and wire fence has been erected on three sides of about 1,000 acres within the reserve. This new fence has been joined at two points to the northern boundary line fence, and the area thereby inclosed makes a good pasture-field. Another fence, made entirely of wood, was erected at a distance from Sandy lake, and this fence and a portion of the lake bounds another pasture-field of about 300 acres in area.

Alexander has completed a splendid new frame horse-stable; Alexis Morin, a good log house, with a shingle roof and a lean-to kitchen; and Bonenose, an extra good log house, since I last inspected this reserve.

The cattle industry has not prospered here. Too many immature animals have been killed. When the Indian owner of animals thought it would be a good thing to have a good supply of fresh meat, he simply singled out an animal and slaughtered it, without reference to the agent.

This band has a credit of about \$90,000, derived from the sale of surrendered lands. The yearly interest of this money has been expended on house finishings, implements, fencing and food for the aged and infirm. This season 24 brood mares and a stallion were purchased, and placed on their reserve, and paid for out of the accrued interest money. This band of mares is to remain under the control of the department, and it is hoped that they will not only provide the required working horses within five years, but increase in numbers as well.

There are only about 125 Indians in this band, all told. No band has better opportunities to improve its position than is within the reach of the Indians of this band. The drink habit was allowed to grow here for too long a period, however, and now it will be, if ever accomplished, a long and arduous task to stamp it out.

MICHEL'S BAND.

The reserve of this band lies just south of the Sturgeon river, and about 7 miles from the town of St. Albert. The soil is particularly good and there is a sufficient quantity of wood, pasture, hay and farm land within its borders for a much larger number of Indians than constantly reside thereon. The area lying east of the projected boundary between ranges 26 and 27 and west of the 4th meridian was surrendered last month. There are about 2,000 acres of choice farming land within the area referred to. There will yet remain within the boundaries about 16,000 acres. It is intended to place a strong post and wire fence on the boundary of the reserve, as now defined, with a view of holding the animals owned by the Indians within the reserve

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limits and keeping out the animals owned by the surrounding whites. If it is a truism that poor dividing fences between whites frequently beget unfriendly neighbours, then by parity of reasoning a fence placed on this and other reserve boundaries is likely to keep the Indians and the near whites on more friendly terms than they would be without such fences.

The Indians of this band have comfortable dwellings and are living as comfortably as their white neighbours.

The cattle had increased from 118 to 129 head between this and my former inspection.

ALEXANDER'S BAND.

The southern limit of this reserve is within 5 miles of the northern limit of Michel's reserve. There is a small lake within the reserve, another one at the north-west corner, and a fairly large one at the south-western corner. A small area near the southern limits is stony; the remaining portion of the reserve is good farming, pasture and hay land. About 10,000 acres of this reserve was surrendered last December.

Very little, if any, improvement was noted among the Indians of this band. There was one new log habitation, with a board roof, five shacks and one stable partially constructed between the inspections of this and the previous year. I was told that the Indians had a very successful hunt, one trader had purchased furs from them that sold for about \$1,500 at Edmonton. A number of cook-stoves, bedsteads, chairs and other articles of furniture were purchased out of the receipts for fur.

About two years previous to this inspection a lumber-sawing outfit was purchased, without a power, and about 60,000 feet of lumber had been sawn from timber cut within the reserve. I was told that there was now very little lumber timber left on the reserve, and the Indians appear to have very little of it in either dwellings or stables.

A new frame stable and a combined office and storehouse have been erected near what is known as the farmhouse. The stable is 30 feet x 40 feet and with 16-foot studs. The first floor is divided into five double horse stalls, harness and grain room, and a square hall from which a stair leads to the hay-loft above. The combined office and storehouse building is 25 feet x 30 feet, and to it is attached an open vehicle and implement shed 14 feet x 30 feet. These buildings were partially painted.

This band numbers about 170 souls. Of this number about one-half constantly reside on or near their reserve; the remaining portion of the band reside at points north, where they gain their own livelihood at fishing and hunting.

No grain was grown by these Indians during the season of 1905, and the root and vegetable production amounted to only: potatoes, 150 bushels; turnips, 50 bushels; carrots, 50 bushels; onions, 20 bushels. Barely sufficient hay was put up for the requirements of the cattle and horses during the winter months of 1905-6.

Instead of the cattle increasing, they apparently are gradually decreasing in numbers. I counted 124 head on October 5. Thirty-two head of this number were calves dropped during the season of 1905.

Ex-Chief Alexander faithfully promised me that he would in future abstain from the use of intoxicating liquor and do all he could to keep the Indians from using it, too. If the ex-chief fulfils the promise he made regarding his own conduct in the future, and is instrumental in getting the Indians to abstain from the use of liquor, great good will be accomplished.

JOSEPH'S BAND.

The reserve of this band is situated on the western shore of Lake Ste. Anne.

These Indians almost wholly gain their livelihood by hunting and fishing. They grew about 150 bushels of potatoes during the season of 1905. Lake Ste. Anne abounds with whitefish, and game, both large and small, is plentiful in the district to the west and to the north of the reserve.

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The day school that was in operation, off and on, for a number of years on this reserve had been closed for want of regular attendance.

The few cattle held by the Indians of this band were well looked after by a few of the elderly women of the band. The men assist at the hay-making and then leave the charge of the cattle to the women herein referred to.

The agent states that the Indians of this band have held the reputation of being a drunken lot. This opinion is, of course, arrived at from his view-point.

PAUL'S BAND.

The reserve of this band is situated on the eastern shore of White Whale lake, and about 32 miles westerly from Edmonton.

White Whale lake covers an area of about 33 square miles. It is a beautiful sheet of fresh water, and in it are multitudes of whitefish of a superior quality.

The Canadian Northern Railway Company has projected a line through this reserve.

There is reported to be a splendid bed of marl lying beneath the surface of a portion of this reserve. This marl deposit was surrendered to the Crown last month, in the hope that capitalists will be found who will develop this industry and the Indians be benefited from the royalty on the output and from the work, of various sorts, which will naturally follow an undertaking of this nature.

The cattle in the hands of these Indians had increased slightly between the dates of the two inspections. They, too, were in good condition, and the number counted agreed with the book record.

A saw-mill was operated on the reserve for a short time during the winter of 1904-5, and the Indians cut and hauled a sufficient number of logs to it to get 87,366 feet of lumber for their own use. The sawing of this lumber was paid for out of accrued interest money due to the band. When the Indians can secure lumber in this way, it is preferable, in my opinion, to owning and operating a mill. The sawing cost \$4 per 1,000 feet. The Indians now have a number of logs cut and piled at a convenient point, and it is intended to get them turned into building material as soon as a mill can be engaged for this purpose.

The Indians had two new dwellings completed and six more partially built when I made the inspection last October.

About 50 tons of old hay was carried over from the season of 1904, and more than their requirements was put up during the season of 1905. They grew about 700 bushels of potatoes, 300 bushels of turnips and about 65 bushels of carrots and onions last season.

The farmhouse is now undergoing needed repairs. A stone foundation wall is being placed beneath, interior lath and plastered, and a brick chimney erected to take the place of the dangerous metal chimney that was in use. There was no suitable building or room in which to hold meetings with the Indians, pay annuities and do like work. Mr. Pattison has recently erected a small building near the farmhouse, and it will fill a long felt want at this point.

On the whole I think this band is progressing to some degree. The railway is now drawing near this reserve, and with it villages will spring up, and this means more numerous and convenient places for the Indians to procure intoxicants. If a stronger grip is not kept over the Indians of this band in the future than there has been in the past, they, too, I fear, will eventually drift into the whirlpool of intemperance, where many of the Indians of the Joseph, Alexander and Enoch bands have been allowed to drift.

BLACKFOOT AGENCY.

This agency was partially inspected during the month of September, and completed during the month of November.

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The staff then comprised Messrs. A. E. Sibbald, agent; W. H. James, clerk; W. S. Cosgrave, farmer at farm 20B; A. E. Jones, farmer at farm 20A; E. Costigan, interpreter; Dr. Lafferty, medical officer.

Since the inspection, Mr. James and Mr. Cosgrave resigned, and Mr. Costigan was replaced by Mr. Paul Fox. Mr. S. M. Dickinson now holds the position of clerk, and Mr. J. F. Laycock the position of farmer at farm 20B.

I found the books and records of the office neatly and accurately kept by Mr. James.

The agency and farm buildings are first-class in every respect, and only require repainting, which is being done at the present moment, to place them in first-class condition.

A less quantity of hay was put up than should have been provided, but the winter proved to be a very open one, and the supply held out. The Indians now acknowledge that they took too great a risk when they left the reserve to put up hay for the ranchers before first providing a much larger supply for their own stock. It is my opinion that they will provide an ample quantity for the requirements of their stock next winter even if it should prove to be longer and more severe than several of the last winters have been.

Including the calf crop of the present season, there are now approximately 3,000 head of cattle in the hands of these Indians. It is thought that there will be nearly a sufficient number of matured steers and old cows to provide the beef requirements for these Indians from this time forward.

Three heads of families provided all their own beef requirements during the fiscal year and eighteen others partially supplied themselves in like manner, all from their own herds. These numbers will be considerably added to during the present and succeeding fiscal years, and I predict that the period is not now far distant when all the able-bodied Indians of the Blackfoot band will be in a position to provide totally all food and other requirements for themselves.

Three members of the band who obstinately declined to take cattle, and in fact advised others not to do so, have purchased about 50 head for themselves.

A start has been made towards providing a better class of dwellings on this reserve. A few previously had very good habitations, notably D. Little Axe, who owns a six-roomed cottage which cost about \$1,200, but the great majority of their living quarters are better defined under the name of 'shacks.' James Appekoke and Paul Little Walker have now under construction a house, each, costing over \$500. The individuals named provided for the cost of these dwellings in the following manner: \$100 was placed in the hands of the agent to meet the cost of freight on the material, purchase nails and other requisites, and \$400 was borrowed from the band's funds, to be repaid in five annual instalments, with interest, for which each of the Indians named gave his promissory note and guaranteed the payment with a mortgage on his cattle. In this way the funds of the band are not jeopardized, and progressive Indians are assisted to secure comfortable, creditable and sanitary houses. Whether it is a good or an evil example, counts for a great deal with an Indian, and I, therefore, look for a number of Indians to follow the example that has been set by Appekoke and Little Walker, just as soon as they are in a financial position to do so.

The Blackfeet were highly honoured during April by a visit from His Royal Highness Prince Arthur of Connaught, and during this visit an address of welcome and a 'peace pipe' were presented to His Royal Highness, for which he made an affable and captivating reply.

STONY AGENCY.

This agency was inspected during December.

The staff of the agency is as follows: Mr. T. J. Fleetham, agent; Mr. A. M. Baptie, stockman, farmer and issuer; Mr. Emil Schmitt, interpreter and labourer; J. D. Lafferty, medical officer.

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I audited the books and the records of the office, and found them to be accurately and neatly kept.

Firewood and posts to the value of \$2,319.84 had been placed on cars by the Indians, and, in addition, these Indians gained \$780.63 by cutting and hauling logs to the saw-mill operated by Messrs. Richard Bros., and near the northern boundary of the reserve. A good deal of money, too, has been earned by these Indians by cutting and delivering wood at the lime kiln, which is operated a few miles west of the reserve. From these sources, from the sale of horses, beef cattle, annuities, &c., these Indians are now providing food, clothing and other requirements for themselves, and very little assistance has been given out from the department's stores, and what has been given was principally to the aged and infirm members of the band.

A new residence has recently been erected for the accommodation of Mr. Baptie. This house is 20 x 26 feet, with a kitchen and pantry 20 x 16 feet attached. It is one and one-half stories high, and on a substantial stone foundation. This house is a frame one.

The agent's house is a frame structure, two stories, and in first-class condition.

There is one shed of frame; all other buildings, excepting the ice and refrigerator buildings, are of log. These log buildings, with the exception of the office, are in good condition, neatly kept, and meet present requirements. It is intended to tear down the old office building this season and erect a new one instead.

The cattle are improving in quality, and the number is gradually increasing, too. The Indians put up a sufficient quantity of hay for feeding during the winter months, and on the whole it is my opinion that this band has shown advancement under the well directed supervision of Mr. Fleetham.

HOBHEMA AGENCY.

This agency was inspected during the month of January, and then during the latter part of April and a few days in May I again visited it, and made a transfer of the agency and the reserves over to the clerk, Mr. Hollies, to hold until the arrival of Mr. G. G. Mann, who succeeded Mr. Grant as agent, who was transferred to the Assiniboine agency to take the place of the late Mr. Thos. W. Aspdin.

On the date of the inspection the staff consisted of: Messrs. W. S. Grant, agent; J. Hollies, clerk; T. W. Lucas and A. W. Perry, farmers; George Fergusson, blacksmith, wheelwright and carpenter; Henry Blanc, interpreter and storeman; John Raggut, mail-carrier and chore man; David Baptiste, assistant farmer, miller and teamster.

Mr. G. G. Mann arrived at this agency on June 4, and has since been in charge.

Dr. Robertson, of Wetaskiwin, is the medical officer, but his visits are only made when advised by the agent that his services are required.

Between this inspection and the one previously made—September, 1904—the Indians erected 11 new dwellings, 5 new stables and 8 new corrals. Most of these new houses are good ones from an Indian's angle of vision, having shingle roofs, dressed lumber floors, ample windows, panel doors and with lean-to kitchens. I was pleased to observe that many of the houses I visited were scrupulously clean and fairly well furnished, too.

These Indians harvested 2,755 bushels of wheat, 3,349 bushels of oats and 175 bushels of barley during the season of 1905.

There are four bands of Indians within this agency, namely: Montana's, Samson's, Ermineskin's and Louis Bull's; the reserves, however, lie side by side.

The agency buildings are located on the north bank of the Battle river and between the reserves occupied by the Montana's and Samson's bands. The only building of the group of much value and in fair condition is the one occupied by the agent, and it is without a stone foundation and not worth more than \$1,200. This building

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is a frame one; all others are log, and were erected more than twenty years ago. They are about 10 miles from Ponoka and 6 miles from the Hobbema siding. The location is not a central one, and as new buildings will be a necessity at a very early date, I think the headquarters should be changed to a more central site and nearer to the Hobbema siding.

Farmer Lucas is stationed on the Montana reserve, and Farmer Perry about one mile northeasterly from the Hobbema siding and within Ermineskin's reserve. The Montana reserve is also known as the Bob Tail's.

There is a water-power, saw and grist mill near the agency. Very little use is made of the grist-mill, however, by the Indians. They find it more convenient and profitable to take their wheat to the mill at Wetaskiwin, where they can get a better grade of flour for their wheat than can be turned out in their own mill by unpractical millers. The saw-mill was not operated during the spring of 1905. It was reported to me that the water in the Battle river was insufficient during the season of 1905 to do so. The Indians had a number of logs on the ground, and these were added to during the winter of 1905-6, and they were being turned into lumber during the months of May and June of this year.

There is a fishing station in connection with this agency—at Pigeon lake—where the Indians spend a good deal of their time during the winter months. Good white-fish are plentiful in this lake, and the Indians secure a greater number than they require for domestic use. The surplus fish find a ready market at both Ponoka and Wetaskiwin.

The books and records of the office were audited, and found to be neatly and accurately kept.

Chief Ermineskin asked that a policeman be stationed within the boundaries of the agency to protect his people from the ravages of fire-water, which he stated was gaining a strong foothold with the Indians of his own and the other bands within the agency.

SARCEE AGENCY.

This agency was inspected during the month of February.

The staff then comprised: Messrs. A. J. McNeill, agent; A. Marshall, stockman; G. Hodgson, farmer and interpreter; Tom. Godin, assistant interpreter; Otter, clover man; John Onespot, Sarcee Woman and David Onespot, herders.

During the autumn of 1904 over 500 head of heifers were placed on this reserve, and these cattle made it necessary to employ a stockman and three herders. Mr. Marshall has, however, since resigned, and now these cattle are looked after by the three Indian herders named above.

There is only one reserve within this agency, and it includes three townships of good farming and pasture land. It is now all inclosed with a post and wire fence, and besides the herd of cattle referred to, the Indians hold, individually, about 300 more. Besides grazing the cattle and horses owned by the Indians, both cattle and horses are accepted from the whites to graze within the reserve, and nearly \$4,000 has been made during the fiscal year of 1905-6 from grazing fees.

During the month of May 28 brood mares and a stallion were purchased out of the funds gained from grazing, and it is thought that this will be a profitable industry, too. It is intended to loan the male progeny from these mares to the Indians as soon as they arrive at an age to be broken and worked, and allow the female progeny to increase the number held for breeding purposes. In this way the Indians will be provided with an ample supply of working horses of greater size and weight than they now hold and with which they are obliged to carry on their present farming operations.

Over 4,000 bushels of oats were grown during the season of 1905, besides which there was a sufficient quantity of potatoes, turnips and carrots harvested for home use.

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These Indians purchased, and paid for out of earnings, a number of implements, and erected a number of stables, sheds and dwellings between the dates of this and the previous inspections.

A stable 135 x 16 feet was erected for the accommodation of the cattle, and to this stable there are two open sheds, each 130 feet long. Stone foundations were placed under the ration-house, implement, tool and storeroom, and an old implement shed was torn down and a new one erected in its place.

As to whether Indians advance or retrocede, largely depends on the staff over them and their general environments, and I am pleased to be able to state that the Sarcee band is advancing both financially and morally.

PEIGAN AGENCY.

There is only one reserve within this agency—the Peigan.

I made an inspection here during March.

The agency staff consists of Messrs. J. H. Gooderham, agent; G. R. Race, clerk and issuer; R. C. McDonald, stockman; John English, interpreter; Wolf Robe, mail-carrier; Philip Big Swan, Charles Grier and Harry White Cow, herders.

Mr. McDonald was the stockman at the lower portion of the Blood reserve, and Mr. Clarke was the stockman at the Peigan reserve, when I last inspected. Since then an exchange of positions was made between these two stockmen.

This reserve has been overstocked, and the Indians have, in consequence, had considerable trouble in securing a sufficient quantity of hay for winter use.

There has been a gradual and decided reduction in the free distribution of food during the last three years, as the following figures testify:—

Year.	Lbs. of beef issued.	Lbs. of flour issued.
1903..	187,851	90,645
1904..	134,376	76,200
1905..	82,245	65,100

This, alone, speaks well of Mr. Gooderham's management during the two years he has been in charge here. Moreover, the present indications are that all the able-bodied Indians of this band will be on the self-supporting list within two years.

This band owns a saw-mill, and it was operated for several years under the management of the agent. This plan of operating the mill did not prove to be entirely satisfactory. Too many of the other branches of the Indians' and agent's work seemed to be sacrificed for the benefit of the saw-mill. The mill was leased about the end of 1904, and 92,092 feet of lumber of various sorts was received up to the time I made the inspection as the Indians' share of the output.

A start has been made on the reserve towards farming, and 1,291 bushels of oats were threshed during the autumn of 1905. Besides the quantity threshed, the oats grown on 15 acres was cut and fed as green feed, and the oats grown on 10 additional acres was fed in the sheaf. An area is now under winter wheat as a test of the capabilities of the reserve land to grow this cereal.

During last year the Indians broke up 60 acres of new land, purchased 5 wagons, 6 sets of work harness, 3 mowers, 4 rakes, 18 saddles, and erected 10 new dwellings and 4 new stables.

With the calf crop of this season included, these Indians will hold over 3,000 head of cattle, and, in addition, they own about 1,000 head of horses.

I was pleased to hear that there was a noted improvement as regards the expenditure of their earnings. A great deal less has been foolishly expended for intoxicating liquor, in fines and costs for offences and in counsel fees. The dismissal of one of the staff for indulging in liquor cleared the atmosphere here to an unmeasurable extent. The Indians could not see the consistency of punishing them for imbibing liquor and winking at a member of the staff for doing the same thing.

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SADDLE LAKE AGENCY.

This agency was included in the Battleford inspectorate until about a year ago, when it was transferred to the Alberta inspectorate.

This agency was inspected during May, and I then transferred it over from Mr. G. G. Mann to Mr. J. Batty. Mr. Mann then went to take charge of the Hobbema agency in place of Mr. W. S. Grant, who had already gone to take charge of the Assiniboine agency, in Saskatchewan.

Mr. Batty held the position of farmer on the Saddle Lake and Blue Quill's reserves for about ten years. He should, therefore, know the Indians and the work here pretty well.

The staff, as constituted before the transfer, was as follows: Mr. G. G. Mann, agent; Miss B. E. Mann, clerk; Mr. J. Batty, farmer; Mr. S. Whitford, interpreter, teamster, blacksmith, carpenter, &c.; Mr. Peter Tomkins, farmer, sawyer, engineer, &c., at the Whitefish Lake reserve; Mr. Peter Erasmus, assistant farmer at Whitefish Lake reserve, and under Mr. Tomkins.

The department's buildings on the Saddle Lake reserve are as follows: agency-house, office, storehouse, vehicle and implement-house, poultry-house and separate stables for horses and for the cows kept by the agent. All of these buildings are in good condition and meet the requirements, with the exception of the house in use by the agent, which requires a stone foundation placed beneath, and a general overhauling.

The farm buildings are all of log and most of them were erected more than twenty years ago, and without proper foundation. A new house, horse stable and implement and vehicle sheds are required. The best of the buildings now in use could be utilized for cattle stables, granary and a workshop.

There are 556 acres under crop now on this reserve, and I hope it will be safely harvested and the yield prove to be a satisfactory one throughout.

Many of these Indians have very creditable dwellings, well fenced fields, and have started to improve their fields by cutting down the small clusters of timber and scrub thereon. When the small bluffs and scrub are removed from these fields, they will be easier to till, and, moreover, more pleasing to the eye.

This reserve appeared to me to be a good one. There is abundance of good arable land, good pasturage, meadows, fuel, and fish in the lakes within the reserve and in the lakes within a reasonable distance from the reserve.

WHITEFISH LAKE BAND.

This band is under the supervision of the agent at the Saddle Lake reserve, and under the direct supervision of Mr. Peter Tomkins.

The reserve is along the eastern side of the Whitefish and Goodfish lakes. It is not as well adapted for farming as is the Saddle Lake reserve. There are small areas of good soil, but on the whole it is broken by hills and low-lying land, which is liable to flood when the lakes are full.

A greater area was put under crop this season than ever before, I think. There is now under grain, roots and garden stuff about 175 acres.

There is a portable flour-mill here, but as there is no available water near it, to supply the engine, the operating expenses are entirely too great. In my opinion this mill should be moved to the Saddle Lake reserve, where the Indians usually grow much more wheat than is ever likely to be grown here.

A commodious new farmhouse and stable were recently erected on the site of the old buildings, where water of a good quality has never been found.

There is a saw-mill in connection with the two reserves, and during the fiscal year of 1905-6 about 45,000 feet of timber was turned into lumber on the shore of the Goodfish lake.

A number of the Indians here, too, have very good houses, and on the whole they appear to be living comfortably.

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GENERAL REMARKS.

No inspection was made of the Blood agency and reserve during the fiscal year. Owing to this report being required at an earlier date than usual and for other reasons, notably the addition of the Saddle Lake agency to this inspectorate, I was unable to make a complete inspection of all the schools and agencies within my inspectorate.

I have, &c.,

J. A. MARKLE,

Inspector.

MANITOBA AND THE NORTHWEST PROVINCES AND TERRITORIES.

OFFICE OF THE INDIAN COMMISSIONER,
WINNIPEG, August 25, 1906.

FRANK PEDLEY, Esq.,
Deputy Supt. General of Indian Affairs,
Ottawa.

SIR.—I have the honour to submit my annual report upon Indian affairs in Manitoba, Saskatchewan, Alberta, the Northwest Territories, and that portion of Ontario included in Treaty No. 3.

Owing to the change of the ending of the Dominion fiscal year from June 30 to March 31, and the consequent earlier assembling of parliament, this report covers only a period of ten months since the last review I forwarded you of affairs under my jurisdiction.

I find after a careful examination of our work in endeavouring to elevate the Indian that the progress made has been most encouraging. The bountiful yield of last year's harvest has stimulated the Indian to extra exertion, and this year's acreage under crop has been largely increased, with every prospect that the returns will amply reward the industrious, and be the means of inducing the dilatory to take up agriculture with the interest and energy required to make successful farmers. The policy of urging Indians to become more reliant on their own exertions for self-support has proved most beneficial, and a very substantial reduction has been made in the issue of food-supplies. I trust, therefore, the day is not far distant when the ration-houses on all reserves will become a thing of the past, and assistance be given in the way of food only to the helpless. The ration-house was a necessity when the Indians were taken off the plains after the disappearance of the buffalo and placed on reserves; but, as they were instructed in cattle-raising and farming, the free issue of food to all was found to interfere seriously with their advancement. Our most prosperous Indians to-day are those living on reserves where the ration-houses were abolished years ago.

The open and mild winter of 1905-6 was most favourable for the live stock industry. In the spring the cattle on the whole were in good condition. The natural increase this year is satisfactory, and the herds on the reserves in southern Alberta are increasing rapidly, so that within a few years all the beef required by the department will be supplied from the Indian herds. Last fall the drop in the price of beef cattle in Manitoba and the west reduced the income received formerly by our Indians from the cattle industry, but the highest going price was obtained by our agents, who superintended the sales on all reserves.

The placing of good stallions on the reserves for breeding purposes is having the desired effect, and the Indians are not slow to notice the improvement in the quality

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of the progeny, and have expressed their gratitude to the department for assisting them to raise a better class of horses. The Indian cayuse is practically of no use for agricultural purposes, and the prices asked for good working horses are in most cases more than the Indian can afford.

The Sioux Indians on the reserves in the Birtle agency, who receive no assistance from the department, and in the main manage their own affairs, continue to prosper, and this year have a very large acreage under crop.

There is very little to report on the condition of the health of the Indians. Outside of those suffering from scrofula and other tubercular diseases, the general health has been fair. Tent hospitals have been opened on some of the reserves, and also in connection with industrial schools, and every means taken to encourage open air treatment by the Indians going under canvas. They are urged to have their houses thoroughly cleaned and ventilated; but, in spite of all the precautions taken, the death-rate from the above mentioned diseases is high.

Two epidemics of a somewhat serious nature occurred on reserves during the year. The first outbreak was in the autumn and early winter at Cold Lake. It at first appeared to be a severe throat trouble; but whatever it may have been in the earlier stages, it developed into diphtheria in January, and a special medical attendant was sent out to deal with it at the beginning of February. He did not find so many cases then as reported, several having died in January. He administered anti-toxin with good results in the cases that came under his notice, quarantined the reserve, and disinfected houses and places where the infection had shown itself. The disease was then pretty well stamped out, as only one mild case developed later on, which was at once treated, and no further symptoms of the disease have been reported. The number of deaths from this outbreak was about 19. The other epidemic was an outbreak of scarlet fever and measles at Fort Alexander, Hollowwater, and Black River, which took place in March last, and resulted in about 25 deaths on the Fort Alexander reserve and 5 at Hollowwater. A doctor was sent to remain with the Indians until the disease was stamped out, everything being done to relieve destitution and suffering, not only for those down with the disease, but for all under quarantine.

As the country is settling up and railways running through or in close proximity to our Indian reserves, with towns springing into existence along their lines, the opportunities of Indians obtaining liquor through the go-between have been greatly increased; but by strict vigilance on the part of our officials and the Royal Northwest Mounted Police, the illicit sale of liquor has been shut off to a large extent. A number of cases, however, have been brought to trial and the offenders punished by fine or imprisonment, or both. In Manitoba, to points where it was impossible to secure a conviction without outside assistance, I have sent a special officer to secure evidence and follow up the cases. The work he has done this year has been satisfactory, and for the present has stopped the liquor traffic among the Indians in the districts visited.

In connection with the liquor question, I have to report the very serious consequences that resulted from Indians of the Duck Lake agency drinking Florida water early in May last. This liquid is eagerly sought after by Indians and others on account of the considerable percentage of alcohol it is supposed to contain; but the article procured in this case appears to have been more poisonous than intoxicating. It was purchased in the town of Duck Lake on Saturday, the 5th of the above month, and was taken to Beardy's reserve, where it was drunk the night following. It caused the death of 6 Indians, 4 of whom died on the night of the 6th, 1 on the evening of the 7th, and 1 early the following morning. An inquest was held before Coroner Stewart, and in their verdict the jury say: 'We find that the Indians came to their death by poisoning by drinking some liquid contained in Florida water bottles.' &c. The analyst at Regina who analyzed the contents of the stomach of one of the Indian victims concluded his report of May 14, to the coroner in these words: 'The presence of methyl alcohol in the stomach of the Indian Apischapace and also in the Florida water of which he drank, together with the symptoms manifested by other Indians who

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also drank this Florida water, all point to methyl alcohol poisoning as being the direct cause of death of these Indians'. The whole matter is being carefully looked into by the Attorney General's Department of the province of Saskatchewan.

There is happily but little serious crime to report among the Indians during the past year. One Sioux Indian lies in Brandon jail awaiting trial on a charge of murder, for shooting another Sioux on the Oak Lake reserve. There are still too many cases in some of the bands of practical bigamy, namely, the desertion of a wife or husband, and living as if married with another woman or man. This kind of crime is not easily brought within reach of the law, as in the second case it is difficult to find proof that even the Indian form of marriage has been gone through. This evil practice, however, is decreasing somewhat as the Indian agents and missionaries uniformly exert their influence against it. Horse-stealing, which was so prevalent a few years ago, seems to be in a large measure stamped out. Several surrenders of portions of Indian reserves were made since my last report. On December 14, last, the Indians of Cote's band, in Pelly agency, surrendered approximately 20,000 acres, but about 6,000 acres were in exchange for an equal quantity of hay-land situated in the fork between the Assiniboine and White Sand rivers, contiguous to their reserve. On the 29th of the same month, Alexander's band, in the Edmonton agency, surrendered 9,518 acres; and last spring a similar arrangement was effected with Pasqua's band, in the Qu'Appelle agency, for about 15,360 acres. Other small surrenders have been taken; and soon after the subdivision surveys of each of these portions of Indian lands are completed and approved, the same will severally be put on the market.

I regret having to report the death on February 9, last, of Agent Thomas W. Aspdin, of the Assiniboine agency, and on the 12th instant of Farming Instructor S. A. Warden, of Poundmaker's reserve, Battleford agency. They were both old-time employees of the department, and their loss is deeply felt in official and private circles.

I refer you to the reports of the inspectors and agents for detailed information respecting the management of the reserves under their direct supervision. It is unnecessary that I should repeat the many instances of progress among the Indians which they describe, and which are largely due to these officers' patient and persistent exertions; or to note particularly the failures which, though sometimes owing to bad management, can in most cases be attributed to the intractable dispositions and indolent habits of not a few members of several of our Indian bands.

Education.—The education of our Indian children who attend school regularly is proving fairly satisfactory. Some few bands, such as Sakimay's, in the Crooked Lake agency, object to missionaries visiting them, and refuse, except a very few heads of families, to send their children to either day or boarding schools. Their prejudice against the advantages of civilization is hard to overcome. Other bands, in the lake districts, though not opposed to education, are frequently absent from their reserves hunting and fishing, in which expeditions they generally take their children along with them, so that it is impossible to secure the regular attendance of the latter at school, which is necessary to advancement. The increase in the number of boarding schools is to some extent overcoming the difficulty; and when railway and steamboat facilities are still further extended so that such schools can receive supplies regularly at moderate rates, more of them should be established.

Day Schools.—There are about 74 schools of this class in the provinces and territories under my jurisdiction. This is a decrease of 7 since my last year's report. Two of these, Sandy Bay and Keeseekouse, have been closed because boarding schools have been opened at these places; 3 have been closed for want of pupils, and 2 are vacant awaiting teachers. Day schools, located on reserves where the Indians are settled closely around engaged in mixed farming, are doing good work when a competent teacher is in charge. I will give an example. The inspector for North Saskatchewan, reporting on Mistawasis day school on April 6, last, says of the work of the present and former teachers: 'Mr. Bryden shows a deep interest in his duties, and as he brings to his work much more than ordinary intelligence and training, the present condi-

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tion of the classes is highly satisfactory. On the reserve also I have observed, as an evidence of the work of former teachers, that the children in their homes and when met upon the road are mannerly, use the English they have learned in a creditable way, and reply freely to questions that are asked them. In this connection one pupil, Willie Muchahoo, deserves special mention as illustrating the work that can be accomplished in a day school when teachers of the right class, properly trained and devoted to their duties, are employed. This young man received his education entirely at the day school here, and was brought up in a home where not a word of English was spoken except by himself, though his parents are in other respects rather respectable and well-to-do Indians. He has recently married a young woman from the Battleford industrial school, who makes a very suitable wife, and they are likely to be one of the most exemplary couples on the reserve, though as yet only twenty years of age. The young man's education is in every respect of a practical and useful character, and is turned to account every day.'

Boarding Schools.—There are now 42 of these schools under my supervision. The Fort Frances school, the last of the four established in exchange for the old St. Boniface institution, was opened last spring, and is now in full operation. The building is completely fitted up with all modern improvements, having good water-supply pumped from the lake by a gasoline engine, convenient bath-rooms and closets, an acetylene gas system, and admirable fire-escapes, which without being unsightly, provide egress with safety for the youngest children eligible to enter school.

The majority of the boarding schools have the full complement of pupils provided for in the estimates, and are doing excellent work. Inspector Markle, of Alberta, reports of the Ermineskin's Roman Catholic boarding school: 'Life and interest in the class work has been sustained to a marked degree at this institution. In all the standards the pupils are carried along with much uniformity. There are few, if any, dull pupils. The conduct of the pupils appears to be everywhere good, and that without any noticeable measures of severe restraint on the part of the staff.' In similar terms Inspector Graham, of South Saskatchewan inspectorate, reports of Crowstand boarding school, which is conducted under the auspices of the Presbyterian Church. He says: 'I inspected the school on April 3, last. At the time of my visit there were 48 children in the institution, 21 girls and 27 boys. I heard the children go through their different exercises and found them very bright, particularly in spelling and arithmetic. Miss McLaren, their teacher, has succeeded in getting the children to speak out well. The larger girls assist in the kitchen and sewing-room in turns, and are given a thorough training in general housework. The girls do the milking in the summer months. * * * * The boys are taught all branches of farming under a competent farming instructor. The farm is well managed, and the training the boys receive could not be improved on. The school farm is the model farm of the district.'

Industrial Schools.—The number of schools of this class is now reduced to eight. As already mentioned, the St. Boniface institution was closed by an exchange, and, on January 4, last, most unfortunately, Rupert's Land school was destroyed by fire. The flames were first seen in the recreation-hall under the class-rooms situate in a wooden building 20 feet from the main building. The latter, though of brick, caught fire on the roof, and in spite of the brave exertions of the staff, pupils, and neighbours, in a short time nothing was left standing of both buildings except the walls of the main building. Most of the contents of the latter were saved, as also the principal's residence, the laundry, and stables. No lives were lost and no person injured. Most of the pupils were at once transferred to Elkhorn industrial school.

Qu'Appelle school, which was burnt two years ago last January, has been rebuilt. It was found impossible to complete the three separate buildings, which the institution now includes, last autumn; but, with the exception of some fittings, they may now be said to be finished. They seem to be well adapted for the large number of pupils who attend the school. There were 203 children on the roll at the end of June, and the opportunities they enjoy for improvement are varied and useful. The farm and

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garden, blacksmith-shop, shoe-shop, bake-shop and carpenter-shop, efficiently conducted as they are, give the boys an admirable means of becoming fitted for the battle of life; while the girls are equally well prepared to earn their living by being taught all kinds of housework, dairying, laundrying and making and mending clothes.

In industrial importance perhaps Brandon school is next to the Qu'Appelle institution. The pupils at the former, Inspector Marlatt says in his last inspection report: 'are receiving a splendid training, and one well fitted to make them useful citizens in after-life. The boys on the farm and in the stable are being taught to do their work in a thorough manner under the skilful teaching of Mr. Milne. Everything has to be done right, at the proper time, and no slipshod is allowed.'

The Regina school, while scarcely behind in agricultural work, has added a very useful feature to its mechanical department. It owns a traction engine, by means of which instruction is given several of the boys in steam engineering, which enables them to run steam threshing outfits, thus causing their services to be in demand.

Elkhorn school is second to none in class work, tidiness, and deportment of pupils. Dunbow, Battleford and Red Deer schools are also doing excellent all-round work.

It is to be regretted that the attendance of pupils at the industrial schools is, generally speaking, not up to the capacity of the buildings and staffs. This is not owing to any repugnance on the part of Indian parents to these schools, but to the fact that they are somewhat distant from the reserves, and Indians, like others, desire to see their children at least once a year. But there are indications that the superior advantages of these schools are telling gradually in their favour.

Cheering reports are being received that not a few of the ex-pupils of industrial and boarding schools are settling down on the reserves to farming and stock-raising and making good homes for themselves. The File Hills colony is prospering, and this year will have a larger crop of grain than ever. A further portion of the reserve has been subdivided into lots suitable for farms; the members of the colony are increasing, houses are being better furnished, wells are being dug to secure good water; and Agent Gordon says: 'All things considered, these young people are in a better position than most white settlers who began five years ago.' But ex-pupils elsewhere are also doing fairly well. Inspector Chisholm mentions nine who are making satisfactory progress on Mistawasis reserve, 'all ex-pupils of the boarding and day schools and accordingly equipped with all necessary education.' Respecting the Pelly agency, Inspector Graham remarks, 'there are quite a number of ex-pupils in this agency and it is these young men who are doing most of the farming'; and in regard to the Birtle agency, Mr. Wheatley, who is in charge, says: 'Marked advancement has been made during the year, which I am sure will continue. A number of ex-pupils of the industrial schools have been assisted by the department, in the purchase of teams of horses, harness, and also lumber to build houses. In most cases the young men have made a fair start in farming, having from 10 to 45 acres in wheat this season, 1906. The training received in the schools will be of great value to them, and these young men should be in time the most prosperous and advanced on their reserves.'

Thus it is seen that the education imparted in our schools is beginning to tell favourably in uplifting the Indians on the reserves; while not a few who have learned trades are earning their livelihood like white citizens in the towns and villages of the country.

I have, &c.,

DAVID LAIRD,

Indian Commissioner.

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BRITISH COLUMBIA,
BABINE AND UPPER SKEENA RIVER AGENCY,
HAZELTON, June 30, 1906.

FRANK PEDLEY, Esq.,
Deputy Supt. General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my annual report and statistical statement, also list of government property in my keeping, to June 30, 1906.

Agency.—This agency is of all, in British Columbia, the most northerly situated, and is bounded towards the north and west by the Northwest Coast agency, towards the south by the Williams Lake agency, and on the east by the Rocky mountains.

For geographical reasons and distinction of entirely different characteristics of nations—nearly equally large—this agency is treated under two divisions.

THE KITSUN DIVISION.

Location.—The supervision of this part of the district begins at, but exclusive of, the Kitselas canyon of the Skeena river, and about 90 miles below Hazelton, terminating beyond its headwaters, covering a distance of about 160 miles, exclusive of Kitwankool, situated on the trail to Ayensk, Nass river, and Kisgegas, on the Babine river, 3 miles beyond its confluence with the Skeena. The other six villages are on both banks of the latter river, and extend towards its source to Kuldoe, their northern limit.

Language.—The language of the Kitsuns is the original of such spoken under different dialects by the Tsimpsons of the coast and the Indians of the Nass river.

Reserves.—The reserves of this division contain, collectively, an aggregate of 19,570 acres of agricultural, grazing, hay and timber land. The areas comprise in their contents mainly natural meadows with growths of balm of Gilead, poplar, willow, alder and hazel, and rolling timber-covered knolls.

Population.—The division has a total population of 1,137.

Nation.—The Indians under this heading are of the Ksun nation—the parent stock of the Tsimpsons of the coast—and its bands will, hereinafter, be dealt with in the order towards the source of the Skeena.

KITWANGA BAND.

Reserves.—The reserves of this band are about equally located on both banks of the Skeena, and comprise an area of 4,275 acres. With these are here included five unsurveyed allotments for fishing grounds.

Population.—The population is 153.

Health and Sanitation.—The Indians enjoyed the best of health, and care is being taken to preserve it by a system of keeping clean all premises and their environs. During the year more of the Indians were vaccinated.

Resources and Occupations.—The resources are fishing, hunting and trapping, and keeping some stock. These Indians mainly occupy themselves with cutting cordwood, tilling their gardens and working in and about the canneries on the coast. The women and children gather a large quantity of wild berries, and dry them for winter use; they also attend to the gardens during the absence of the men.

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Buildings.—Care is being taken that all buildings are located on dry and healthy ground, and are spaciouly arranged to combine comfort with privacy; also with windows enough to ensure the access of plenty of sunlight and fresh air.

Stock.—Cattle and horses wintered without loss, and better arrangements for shelter and provender are constantly being made for the same.

Farm Implements.—The implements used are not such as would be used in actual farming, but suffice in clearing and tilling land for the potato and other root-crops, and in reaping and stowing hay.

Education.—The school here is under the auspices of the Anglican Church, and is centrally located in the village. The school is endowed with the usual grant for day schools, and is making good progress, to which the pupils' parents contribute by encouraging its attendance.

Characteristics and Progress.—These Indians are intelligent, law-abiding and industrious, and very progressive in their tendencies. They have surprisingly improved their general condition.

Temperance and Morality.—The members of this band are temperate and moral.

KITWANKOOL BAND.

Reserve.—The village of this band, for which no reserve has yet been allotted, is the only one remotely situate from the Skeena, and is located on the right bank of the Kitwanga river, 25 miles from Kitwanga and 4 miles below Lake Kitwankool and on the trail to Ayensk, Nass river.

Population.—The population, not counting about 115, living at Ayensk, Kincolith and Fishery bay, Nass, is 69.

Health and Sanitation.—There is no illness to mention. Sanitary measures are fairly well observed, and more of this band have been vaccinated.

Resources and Occupations.—To this band the lake of the same name yields an unlimited supply of salmon. Hunting and trapping bring good returns, and the gathering of wild berries by the women and children. Though somewhat isolated, these Indians, like their kindred, are alive to every opportunity offering employment. Generally, during the season, they work in the salmon canneries of the coast and earn fair wages, when conditions permit.

Buildings.—Buildings recently erected are, as elsewhere, of modern make and well located.

Stock.—Cattle and horses wintered well and without loss, and better provision is being made for their keep.

Farm Implements.—Only the tools for clearing, gardening and weeding are in use.

Education.—There is no school in this village. Some of the children periodically attend school at Kitwanga and also at Kincolith and Ayensk, Nass.

Characteristics and Progress.—These people, especially the younger, are industrious and endowed with ambition. By reason of their isolated condition many of the latter have betaken themselves to the aforementioned localities. However, conditions soon may change to bring them back. As a whole, the people of this band are favourably progressing in every respect.

Temperance and Morality.—During the year passed, no complaint in regard to either intemperance or immorality arose.

KITSEGUKLA BAND.

Reserves.—The reserves of this band are located on both banks of the Skeena, and contain an area of 3,732 acres. The new and old villages are situated on the left bank of the river; the latter about 9 miles below the first. Since reserve No. 2, containing

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the new village, inclusive of the part on the opposite bank, became subdivided, only the new village will prevail in the near future.

Population.—The people of this band's two villages number 93.

Health and Sanitation.—During the year the Indians were in perfect health. In the new village, the premises and their surroundings are kept very clean, and in the old village fairly so; more of the people of both were vaccinated.

Resources and Occupations.—The principal resources of this band are fishing, hunting and trapping. Its members largely seek employment, during the season, at the canneries of the coast, and spend much of their spare time in chopping cord-wood and in improving their homes and land.

Buildings.—With the exception of those of the old village, the houses are well located, modern, fairly commodious and amply lighted.

Farm Implements.—With the exception of a good plough, only ordinary implements required for breaking up land, clearing and tilling the soil, and for haying, are yet in use.

Education.—Here, fair progress is being made at the school. The same is still being conducted in the old village, to which it is centrally located. At the new settlement another is under construction at a very central point.

Characteristics and Progress.—The Indians of this band are law-abiding, diligent and continuous workers. They are much advanced in every respect and give great promise for the future.

Temperance and Morality.—In both these respects their conduct is excellent.

GETANMAX BAND, HAZELTON.

Reserves.—The reserve lands of this band are located, with the exception of a timber reserve, on Two-mile creek, on both banks of the Skeena, and inclusive of Rocher Dcoulé, also assigned to this band, and on both banks of the Bulkley river, comprise a total area of 3,791 acres.

Population.—This band, largely composed originally of people of other villages, has a population of 245.

Health and Sanitation.—The health of the Indians was very good. The usual precautionary measures were observed, and more of the people were vaccinated. No trace of any contagion made itself apparent. Cases of illness are being treated by Dr. H. C. Wrinch, and by his services many cases among the Indians of this district were most successfully disposed of by surgical operations.

Attention is given to cleanliness of person, premises and their surroundings. Old houses, causing dank environs, are removed on available opportunities. The Indians are also advised of instructions and suggestions concerning tuberculosis, and to prevent, as much as possible, its dissemination.

Resources and Occupations.—Fishing, hunting and trapping are more or less a means of resource. Hazelton being the terminus of communication of the larger part of this district, and the entrepôt of supplies for the interior, the Indians of this band, with those nearby, readily find employment of all sorts at good wages.

Buildings.—All buildings outside of the old village are well placed, of good pattern, well lighted and commodious.

Stock.—The cattle and horses wintered well; they were fairly well provided for.

Farm Implements.—With the exception of a harrow, the implements are such as are generally used for clearing, gardening and haying.

Education.—The school here is under the auspices of the Anglican Church, and is endowed with the usual grant. It is well attended during the season, and the parents of the pupils are taking more interest in having them attend. The school-house occupies the north end of the Hazelton townsite; near the old Indian village.

Characteristics and Progress.—The Indians of this band are law-abiding, industrious and provident. What they earn in wages is generally put to good use. Subdivisions of their reserves are steadily being taken up and improved.

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Temperance and Morality.—Though, here, the temptations to transgress in both respects are many, the complaints are few.

GLEN VOWELL BAND.

Reserve.—The village of this band is located about 4 miles above here, on the special reserve of Sikedach, on the right bank of the Skeena. This reserve contains 900 acres, which are subdivided into holdings of choice agricultural and pasture lands.

Population.—This band has a population of 83.

Health and Sanitation.—The health of this band was excellent. The necessary sanitary precautions are well observed, and more of the people were vaccinated.

Resources and Occupations.—In addition to doing some fishing and hunting, the people keep some stock. In other respects they usually earn good wages at the various employments, to which a local saw-mill largely contributes. Much of their time is also given to the improvement of their holdings.

Buildings.—The buildings of this settlement are of good and uniform pattern, commodious and well lighted.

Stock.—The cattle and horses are properly looked after, and fair provision is made for their keep and shelter.

Farm Implements.—Only the necessary implements for breaking up land, gardening and haying are in use here.

Education.—There is good progress made with the school. Its premises are in the centre of the village, and the parents of the children are assisting in making the attendance good and punctual. This school receives the usual grant.

Characteristics and Progress.—The people are law-abiding, industrious and persevering. Much of their land has been converted into pasture and gardens, and more is being cleared and well fenced. All that is accomplished, in so short a time, deserves favourable mention.

Temperance and Morality.—The people form a temperate and moral community.

KISPIAX BAND.

Reserves.—The village of this band is situated about 8 miles above and to the north of here, on the right bank of the Skeena and on the left bank of the mouth of the Kispiax river. The principal reserve is on that side of the former river, with the special reserve of Aquedin north from the village of Kispiax, and, inclusive of Sikedach, mentioned with the preceding band, comprises a total area of 4,916 acres of agricultural, grazing and hay land, which to a large extent has been subdivided.

Population.—This band has a population of 215.

Health and Sanitation.—The general health of these Indians has been very good. The usual precautions are taken to preserve it, and some of the people were vaccinated. On Friday of every week Dr. H. C. Wrinch, of here, visits their village, where he maintains a branch dispensary for the treatment of cases of sickness and ailments occurring.

Resources and Occupations.—The Indians of this band hunt, trap and fish, and also operate a saw-mill, improve their land, and quite a number of them repair to the coast in search of employment about the salmon canneries there. Many of the women and children gather wild berries and dry them for winter use, and attend to the gardens.

Buildings.—All buildings erected here of recent years are of very superior quality, being in marked contrast to the old ones.

Stock.—The cattle and horses wintered well, and better care is being bestowed upon them from year to year.

Farm Implements.—With the exception of two harrows, only the ordinary tools for clearing land, gardening and haying are in use.

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Education.—School is being taught in a house fairly centrally located and improvised for that purpose. During the winter season it is well attended. Good progress is made by its pupils. The parents of the latter take an interest in the matter by encouraging their attendance, when conditions permit.

Characteristics and Progress.—These people are ambitious, industrious and provident. They are steadily improving in every respect, and are giving a good account of themselves.

Temperance and Morality.—Regarding the former, violations seldom occur; morally, their conduct is fair.

KISSEGAS BAND.

Reserve.—The home of this band is about 68 miles to the north of here, on the right bank of the Babine river, and 3 miles above its confluence with the Skeena. The reserve embraces both sides of the Babine river, with an area of 2,415 acres.

Population.—This band has a population of 240.

Health and Sanitation.—The Indians' health has been excellent. Sanitary measures are observed and vaccination is being attended to.

Resources and Occupations.—The resources of this band are: catching salmon, mainly in the canyon below the village, hunting and trapping. Its hunting and trapping grounds extend far beyond the head-waters of the Skeena and Babine rivers. Bear lake, also to Stikine. When at home, the people occupy themselves in improving their gardens, and in breaking up more land. The women and children gather and dry wild berries for winter use.

Buildings.—Here also, only buildings of modern pattern are supplanting the old.

Stock.—The stock, consisting only of horses, wintered well.

Farm Implements.—Only the ordinary tools for clearing land, gardening and haying are used.

Education.—The mission building, conveniently located, is used for school purposes. The children are making fair progress and their parents encourage attendance. This school is also being supplied by the department with the usual grant.

Characteristics and Progress.—These Indians are very intelligent and industrious, but their energies are still mainly applied to the fishing, hunting and trapping grounds. As a whole, much improvement of their condition is steadily going on.

Temperance and Morality.—These Indians are temperate and moral.

KULDOE BAND.

Reserve.—The village of this band is situated on the right bank of the Skeena, and is connected with Kisegagas by a rough trail to a distance of about 25 miles across the mountains. The reserve contains 446 acres of land, which is almost equally divided in area on both banks of the Skeena.

Population.—The people of this band number 39.

Health and Sanitation.—The health of these people has been very good. The usual sanitary measures are observed and more of the people were vaccinated.

Resources and Occupations.—The river furnishes a goodly supply of salmon. For so few people, the large hunting-grounds give big returns. Of late, more of their time is occupied in attending to their gardens.

Buildings.—The buildings here are still made of split cedar and are of the primitive kind.

Stock.—Of stock these Indians have none.

Farm Implements.—Tools for breaking up land, gardening and weeding are used.

Education.—There is no school at this village, but the children periodically attend that of Kisegagas.

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Characteristics and Progress.—The people are law-abiding and intelligent; though remotely situated, they are striving for the better by extending and improving their potato-grounds, and in breaking up more land.

Temperance and Morality.—This band observes temperate and moral habits.

HAGWILGET DIVISION.

Location.—This division begins within 3 miles to the southeast of Hazelton, and extends in that direction for a distance computed at 325 miles, and terminates at Fort George, on the Fraser river. But, in reality it includes additionally the area wherever over its wide expanse range two bands of Naanees, between Blackwater and the Rocky mountains.

Language.—Hagwilget or the Déné, a language of a small vocabulary with shifting intonation, is spoken and understood by all the Indians to be dealt with hereinafter.

Reserves.—The reserves of this division embrace an area of 29,510 acres of agricultural, grazing, hay and timber land, with 17 villages under the Babine and Carrier groups.

The natural features of the reserve lands consist in the main of flat-lying meadows that are backed by recurring benches more or less timbered.

Population.—The total population is 1,956, including for this year that of Chislatta and Francis lakes, south of the telegraph line.

ROCHER DÉBOULÉ BAND.

In dealing with the following, I deem it admissible to reserve for the summing up remarks in regard to localities identical in feature and conditions from beginning to end.

Reserve.—The village of this band is located 3 miles to the southeast of Hazelton, on the lofty left bank of the Bulkley river, and at its main canyon. The reserve comprises both sides of that river, and contains an area of 443 acres, which is assigned to the Getanmax (Hazelton) band.

Population.—This band numbers 158.

MORICETOWN BAND.

Reserve.—The village of this band is situated on the left bank of the Bulkley river, and at its second big canyon, south. In area, the reserve lands contain 1,853 acres.

Population.—This band has a population of 159.

FORT BABINE BAND.

Reserve.—The village is located on the right shore of Babine lake, near its discharge, the Babine river, where there is a bridge of about 200 feet in length. The reserve has an area of 894 acres, situate partly on each bank.

Population.—This band has a population of 150.

OLD FORT BABINE BAND.

Reserve.—The village is on the right and the reserve lands are on both shores of this lake, and contain an area of 359 acres.

Population.—The population of this band is 134.

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YUCUTCE BAND.

Reserve.—The village and reserves are located at the head of Stuart lake, on the intervening 9 miles of land, or portage, between Babine and Stuart lakes. The reserve area is 817 acres.

Population.—The population of this band is 16.

TATCHÉ BAND.

Reserve.—The village and reserves are situated on the left bank of Stuart lake, and the former at the mouth and left bank of the Tatché river. The reserve area consists of 1,779 acres.

Population.—This band's population is 64.

PINTCE BAND.

Reserve.—The village and reserve are on the left shore of Stuart lake, and the former at the mouth of the Pintce river. The reserve contains 728 acres.

Population.—This band numbers 43.

GRAND RAPIDS BAND.

Reserve.—The village and reserve are on the right bank of Tatché river, at the point commonly called Trembleur river. The reserve area amounts to 584 acres.

Population.—This band numbers 26.

TSISLAINLI WITH TSISLI BAND.

Reserve.—The two villages and reserves of these, the people of one and the same band, are at the head of Trembleur lake and left bank and mouth of Tatla river. The reserves contain 1,291 acres.

Population.—This band's population is 20.

STUART LAKE BAND.

Reserve.—The village and reserves of this band are on the left shore of Stuart lake, and at its discharge, the Stuart river. The area of the reserves is 2,875 acres.

Population.—The population of this band is 193.

STELLA BAND.

Reserve.—The village and reserve of this band are on the right bank of the Stella river, and near its discharge into Fraser lake. The reserve area is 2,077 acres.

Population.—The population of this band is 58.

FRASER LAKE BAND.

Reserve.—The village and reserve of this band are on the left shore of Fraser lake at its discharge, the Natleh river. The reserve consists of 1,949 acres.

Population.—This band numbers 65.

CHISLATTA LAKE BAND.

Reserve.—No reserves are yet allotted to the Indians of this band, with three separate villages, to the south of the telegraph line, south. Of these, Belgateé and Stilachola are situated on the north shore of the lake, and Chislatlate on the west end and head thereof.

Population.—The population of this band, consisting of three villages, totals 73.

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FRANCIS LAKE BAND.

Reserve.—Likewise, no reserves are yet allotted to this band with habitations, in one locality (Tatchgaigak) on the south shore, and another (Tatla) on the north shore of the lake. The last named is situate on the head of the lake and near the mouth and left bank of the Nadina river.

Population.—This band numbers 33.

STONY CREEK BAND.

Reserve.—The village of this band is located on the right bank of Stony creek, and the reserve on both of its banks extends down to its discharge into Noolka lake. The reserve area comprises 7,488 acres.

Population.—The population of this band is 108.

FORT GEORGE BAND.

Reserve.—The village is on reserve No. 1, on the right bank of the Fraser river; No. 2 reserve is located on the same side of that river; No. 3 is situate on the left bank of the Nechaco river, with No. 4 on the latter's right bank, and also on the right bank and mouth of Mud river, one of its eastern affluents. In area, the reserves consist of 3,095 acres.

Population.—This band numbers 124.

BLACKWATER BAND.

Reserve.—Reserve No. 1 is located on the right bank of the Fraser river; No. 2, on the left bank of the Blackwater river, and No. 3, on the eastern shore of Nattesley or Bobtail lake; they comprise an area of 537 acres.

Population.—This band has a population of 65.

MCLEOD LAKE BAND.

Reserve.—The village is situate on the western shore of McLeod lake, and the reserve, on both banks of Long river, contains 286 acres.

Population.—The population of this band is 100.

FORT GRAHAME AND LAKE CONNELLY BANDS OF SIKANEES.

Location.—The principal trading point of the first named band of Sikanees is Fort Grahame, and Connelly lake outpost, likewise called Bear lake outpost, that of the latter. Their hunting and trapping grounds extend in an unrestricted measure over a radius of about 400 miles easterly from the localities mentioned.

Habits and Customs.—Both of these bands are nomadic in their habits. They mainly subsist on fresh and smoked meat of moose, cariboo and beaver. With rather an absolute singleness of purpose to keep in quest for meat and pelts, it makes these Indians excellent in their pursuits on the nomadic plane. Regarded respectively rather in a broad outline than in detail the people of these two bands are one.

There is an ingathering of all when the priest of the district designates the exact locality at an appointed time.

Population.—According to latest advices, the Fort Grahame band has a population of 91.

The Connelly Lake band numbers about 121.

CONNELLY LAKE BANDS OF NAANEES.

Location.—Under conditions similar to those of the two aforementioned bands, two semi-nomadic bands of Naanees roam over a large range of country to the north-

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ward of Connelly lake. Likewise, these concentrate only at a common point of meeting, in instances as formerly alluded to.

Population.—According to last reports, these two bands have a population of 155, collectively.

REMARKS CONCERNING HAGWILGET DIVISION.

Health and Sanitation.—During the year the Indians' health was excellent. They are aware of the necessity of general cleanliness and are mindful of it. No contagion of any kind appeared, and many of the people have been vaccinated.

Resources and Occupations.—The main resources of all the bands are hunting, trapping and fishing, with the latter as a resort except with those of the outlying bands. The people of Rocher Déboulé, Moricetown, Fort Babine, Stuart lake and Stony creek largely engage in packing with their horses. As a whole, they attend more and more to their gardens.

Buildings.—With the exception of the nomadic Indians, the people take increased pains in putting up substantial houses of modern style and arranged for comfort.

Stock.—Exclusive of the bands mentioned, there are cattle and horses in every locality. They all wintered well and better provision is being made for their keep and shelter.

Farm Implements.—Barring a mower and horse-rake at Moricetown, the implements are still such as scythes, hand-rakes and others useful in clearing and tilling the soil.

Education.—There are no schools on any of the reserves, but the people have learned to read and write in syllabic ideographs.

Characteristics and Progress.—With these people honesty, faithfulness and probity are their chief characteristics. Slowly, but steadily, have they been improving their condition. No doubt, a general progress is sure to develop with these Indians at a ratio in proportion as the country will open up and the opportunities appear.

Temperance and Morality.—During the year, no information of infraction of either temperance or morality came from within this division.

I have, &c.,

R. E. LORING,

Indian Agent.

BRITISH COLUMBIA,

CASSIAR AGENCY,

TELEGRAPH CREEK, June 30, 1906.

FRANK PEDLEY, Esq.,

Deputy Supt. General of Indian Affairs,

Ottawa.

SIR,—I have the honour to submit my report for the Cassiar agency for the year ended June 30, 1906.

Reserve.—The two reserves are located at and near the mouth of the Taltan river, and consist of 415 acres. Located on bars on both sides of the river are the drying houses where the Indians put up salmon during the summer months. Their village is about 1 mile from the river.

Population.—The population of the Taltan band is 220.

Health and Sanitation.—The general health of the band is good. Early in the spring the village was well cleaned and the refuse burnt.

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Occupations.—The general occupation of the band during the fall and winter is trapping fur-bearing animals. In the summer months the younger men are employed as packers, boatmen and guides, while the older ones are drying salmon for winter use.

Buildings.—The buildings are all of logs, well built, warm and comfortable.

Stock.—They have only a few head of horses.

Farm Implements.—These Indians have none.

Education.—There are no schools on this agency.

Characteristics and Progress.—The Indians of this agency are industrious and law-abiding, and are becoming richer.

Temperance and Morality.—As a tribe they are fairly temperate. Some few are addicted to the use of intoxicants. While some of the younger ones are immoral, most of the tribe are moral, well-behaved Indians.

I have, &c.,

J. FRANK CALLBREATH,

Acting Indian Agent.

BRITISH COLUMBIA,

COWICHAN AGENCY,

DUNCAN'S STATION, July 13, 1906.

FRANK PEDLEY, Esq.,

Deputy Supt. General of Indian Affairs,

Ottawa.

SIR,—I have the honour to submit my annual report on the affairs of this agency for the year ended June 30, 1906.

Agency.—This agency is situated on the east coast of Vancouver island, and extends from Cape Mudge on the north to Sooke on the south, including the reserves on the different islands in the gulf of Georgia.

Area.—The total area of the reserves in this agency is 19,893 acres, forming a portion of the territory occupied by the Cowichan nation, whose language and influence formerly extended to the bays and sounds on the American side of the gulf and up the Fraser river as far as Yale. These reserves are occupied by the following bands:—

SOOKE BAND.

Reserves.—(Nos. 1, 2, 3 and 4.)—The reserves of this band are situated on the straits of Juan de Fuca, about 25 miles southwest of the city of Victoria, and contain an area of 166 acres.

Population.—The population of this band is 24.

Health and Sanitation.—These Indians all enjoy good health, and their premises are kept clean.

Occupations.—The Indians are chiefly engaged in farming, fishing, and working at the fish traps.

Buildings.—They have comfortable dwellings, and well furnished. One new dwelling was erected during the year.

Stock.—They have good horses and cattle, and take good care of them.

Farm Implements.—They have good implements, and take good care of them.

Education.—There is no school on this reserve. Some of the children attend the Kuper Island industrial school.

Characteristics and Progress.—The Indians continue to improve their condition.

Temperance and Morality.—They are temperate and moral.

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CHEERNO BAND (BEECHER BAY).

Reserves.—(Nos. 1 to 11 inclusive.)—These reserves are situated on the straits of Juan de Fuca, about 15 miles southwest of Victoria, and contain 779 acres. As most of the land in these reserves is hilly and rocky, very little farming is done.

Population.—The population of this band is 45.

Health and Sanitation.—The health of the band is very good. They are careful to keep their dwellings clean.

Occupations.—These Indians are chiefly engaged in farming, fishing, working at the fish traps and canneries.

Buildings.—Their dwellings are very good; principally large rancherie houses.

Stock.—Their stock is only of medium quality.

Farm Implements.—They possess a few farm implements of fair quality.

Education.—There is no school on these reserves.

Characteristics and Progress.—These Indians are fairly industrious, and show a desire to better their condition.

Temperance and Morality.—Although a small number of these Indians give way to drink, yet they are not what may be termed immoral.

SONGHEES BAND.

This band comprises the following sub-families: the Esquimalt and Discovery Island Indians, as well as the Songhees Indians.

Reserves.—(Nos. 1, 2, 3 and 4.)—These reserves are situated on the harbours of Victoria and Esquimalt, and on the islands in the straits of Juan de Fuca: the total area of these reserves is 306 acres.

Population.—The population of this band is 149.

Health and Sanitation.—The health of these Indians is very good, having first-class water supplied to them from the Esquimalt Water Works Company. Their homes are kept clean.

Occupations.—Fishing, hunting, stevedore-work, farming and working in saw-mills and factories are the chief occupations.

Buildings.—Their dwellings are neat and well built; a few old rancherie buildings remain. Their homes are well furnished.

Stock.—They have good stock and they take good care of them.

Farm Implements.—Their implements, of which they have a good supply, are well taken care of.

Education.—There is a school on the Songhees reserve, which is fairly well attended.

Characteristics and Progress.—These Indians are industrious and many of them well-off.

Temperance and Morality.—As a whole they are temperate and moral; a few have acquired a fondness for intoxicants and will procure liquor whenever possible.

BANDS IN THE SAANICH DISTRICT.

Reserves.—The following bands occupy reserves numbered 1 to 13, inclusive, in Saanich district, viz.: Malakut, Tsekum, Pauquachin, Tsartlip, and Tsawout; the total area of the said reserves being 3,318 acres.

Population.—The total population of these bands is 253.

Health and Sanitation.—Their general health has been very good; the sanitary conditions about their dwellings are fairly good.

Occupations.—Farming, fishing, hop-picking, working in the cement-works and mines are their occupations.

Buildings.—A few live in the rancherie houses; others have frame and lumber dwellings and well furnished.

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Stock.—They have improved breeds of stock and take good care of them.

Farm Implements.—They have a good supply of up-to-date implements, including a steam threshing outfit.

Education.—There are two schools provided for these Indians, one situated at Tsawout, the other near the Tsartlip reserve. They take considerable interest in educational matters. Some of the children attend the Kuper Island industrial school.

Characteristics and Progress.—The majority of these Indians are industrious and are making fair progress in mixed farming and boat-building.

Temperance and Morality.—A majority of these Indians are fairly temperate and moral; unfortunately a few will procure intoxicants whenever possible, and then will become very quarrelsome.

BANDS IN COWICHAN DISTRICT.

Reserves.—The following bands occupy reserves numbered 1 to 8, inclusive, in Cowichan valley, which is situated on the east coast of Vancouver island, about 40 miles north of the city of Victoria, viz.: Kilpaulus, Comeakin, Clemclemeluts, Khenipsin, Koksilah, Quamichan and Somenos. The total area of these reserves is 6,088 acres.

Population.—The combined population of the seven bands is 655.

Health and Sanitation.—All the villages are situated on the banks of the Koksilah or Cowichan river, thus affording a constant supply of fresh water and good drainage; the sanitary conditions are good.

Occupations.—Their chief occupations are farming, fishing, hunting, teaming, boat and canoe-building, working in canneries, hop-picking, and as trackmen on railways.

Buildings.—The character and number of their dwellings continue to improve, some of them are very comfortable and well finished; their barns and stables do not receive much attention.

Stock.—They take great pride in having good horses, both heavy draught and roadsters, and display considerable intelligence in buying and breeding; there is a marked improvement in the quality of horses owned.

Farm Implements.—They are well supplied with all the most modern and up-to-date machinery, all of which is well taken care of.

Education.—There are four schools provided for these Indians, one situated at Somenos, one at Clemclemeluts, one at Quamichan, and one near the Koksilah village; the two former are supported by a grant from the department, and the two latter by the Women's Missionary Society of the Methodist Church. Parents are taking more interest in education, children are making fair progress considering the irregularity in attendance.

Characteristics and Progress.—They are industrious, and take considerable interest in farming, but owing to the great demand for all class of labour and high wages paid, the progress made in clearing their land is not what would be desired.

Temperance and Morality.—They are fairly temperate. A few of them are fond of intoxicants, and will procure them at any cost. Their morals will compare favourably with those of any Indians on the coast.

HELLELT BAND.

Reserves.—(Nos. 1 and 2 of the Chemainus band.)—One reserve is situated on the south bank of the Chemainus river, about a mile and a half from its mouth; the other on an island at the mouth of the same river. The two reserves contain a combined area of 427 acres.

Population.—The population of this band is 27.

Health and Sanitation.—These Indians all enjoy good health. No sickness of a contagious nature has prevailed among them. During the summer months they all

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live in their private houses, but in the winter they all return to their large rancherie houses.

Occupations.—They do a little farming, fishing, hunting, working in smelters, and clearing land for white settlers.

Buildings.—Their dwellings are fairly well constructed, many of them being frame and lumber, the large rancherie houses being kept clean.

Stock.—They do not own much stock, and only of medium quality, but take fairly good care of it.

Farm Implements.—They have all necessary farm implements, and take good care of them.

Education.—There is no school on this reserve.

Characteristics and Progress.—They are industrious and earn considerable money, but do not make much improvement on their reserve.

Temperance and Morality.—They are fairly temperate, and seldom get into trouble. A few of them have acquired a desire for intoxicants, and will procure them whenever possible.

THE SICCAMEEN AND KULLEETS BAND.

Reserves.—(Nos. 10, 12 and 13 of the Chemainus band.)—The main reserve is situated between Oyster harbour and Chemainus bay. One reserve is on the western shore of Oyster harbour, a fishing station on the left bank of the Chemainus river, near its mouth, the total area of which is 3,084 acres. There is no line dividing the lands of the two bands.

Population.—The population of this band is 107.

Health and Sanitation.—Like the other reserves, there is a good supply of clear spring water on the beach. There has been no sickness among the Indians of this band during the year.

Occupations.—These Indians are principally employed in fishing and attending their oyster beds; they do a little farming.

Buildings.—They have a number of neat dwellings, well constructed and painted, in which they live during the summer months.

Stock.—These Indians have very little stock, but what they have is well taken care of.

Farm Implements.—They have very few farm implements.

Education.—There is no school on this reserve. A few of the older children attend the Kuper Island industrial school.

Characteristics and Progress.—These Indians are industrious and law-abiding. Some of them are above the average in intelligence.

Temperance and Morality.—These Indians are fairly temperate, and seldom get into trouble.

LYACKSUN BAND.

Reserves.—(Nos. 3, 4 and 5 of the Chemainus band.)—These reserves are situated on Valdez island, and consist of three reserves, which have a combined area of 1,840 acres.

Population.—The population of this band is 82.

Health and Sanitation.—These Indians have enjoyed good health. The sanitary conditions are good.

Occupations.—These reserves are nearly all rock or heavy timber. The Indians do very little farming; boat and canoe-building and fishing are their chief occupations. They have built and own a steam tug, which is used in towing logs.

Buildings.—Their dwellings are built of dressed lumber, and are well constructed. They seldom live in the large rancherie houses.

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Stock.—They have some well bred stock, but these animals are allowed to run wild on the island, so are not given much attention.

Farm Implements.—They have all the necessary farm implements, and take good care of them.

Education.—There is no school on this reserve. Some of the children attend the Kuper Island industrial school.

Characteristics and Progress.—These Indians are law-abiding, and are making fair progress.

Temperance and Morality.—They are fairly temperate and moral.

PENELAKUT BAND.

Reserves.—(Nos. 6, 7, 8 and 9.)—This reserve includes the Llmalche and Tsussie bands. These reserves are situated on Kuper island and Tent island, and on the northwest extremity of Galiano island. There is also a small reserve belonging to this band situated at the mouth of Chemainus river. The total area of these reserves is 2,332 acres.

Population.—The total population is 212.

Health and Sanitation.—The health of these Indians has been very good. They have a supply of good spring water. The sanitary conditions are very good.

Occupations.—The chief occupations of these Indians are fishing, boat and canoe building, working stevedore and hunting. They are taking more interest in clearing and cultivating their land.

Buildings.—Their dwellings are in fair condition, many of their houses being constructed of lumber, and painted.

Stock.—They are increasing their stock year by year, and take fairly good care of it.

Farm Implements.—They have a good supply of farm implements.

Education.—The Kuper Island industrial school is situated on one of the reserves, and many of the children attend the same.

Characteristics and Progress.—These Indians are industrious and law-abiding, and are making steady progress.

Temperance and Morality.—These Indians are temperate and moral, with but few exceptions.

NANAIMO BAND.

Reserves.—(Nos. 1 to 6 inclusive of the Nanaimo band.)—This reserve consists of a reserve on the Nanaimo harbour and one on the Nanaimo river, with a small fishing station on the southern shore of Gabriola island. The total area of these reserves is 637 acres.

Population.—The population of this band is 161.

Health and Sanitation.—The health of these Indians has been fair. Deaths all occurred from consumption. The sanitary conditions are not what they should be. Consumption is the prevalent disease among them.

Occupations.—These Indians do considerable farming, working in the coal mines, trimming coal in the ships, and fishing.

Buildings.—A few of them have good comfortable dwellings, and keep them clean and neat, but a good many of them live in the large rancherie houses.

Stock.—The quality of their stock is much improved, as they are taking more interest in improving the breeds.

Farm Implements.—They have a good supply of all the latest improved farm implements, and take good care of them.

Education.—There is a school on this reserve, and they take great interest in the progress of their children.

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Characteristics and Progress.—These Indians are industrious and law-abiding, and are making satisfactory progress.

Temperance and Morality.—A majority of these Indians are temperate and moral, but a few of them are frequently in trouble through indulging in intoxicants.

SNONOWAS BAND (NANOOSE).

Reserve.—This reserve is situated on the southern shore of Nanoose harbour, and has an area of 209 acres.

Population.—The population of this band is 13.

Health and Sanitation.—The Indians are fairly healthy. The sanitary conditions are all that could be expected.

Occupations.—The principal employment of these Indians is fishing and the manufacture of dog-fish oil. They do a little farming.

Buildings.—Their dwellings are of frame, and are fairly well constructed.

Stock.—Only a few are kept of medium quality.

Farm Implements.—They have very few farm implements.

Education.—There is no school on this reserve, and very few children.

Characteristics and Progress.—They are industrious and law-abiding.

Temperance and Morality.—They are temperate and moral, and very rarely get into trouble.

QUALICUM BAND.

Reserve.—This reserve is situated at the mouth of the Qualicum river. It has an area of 197 acres.

Population.—The population of this band is 13.

Health and Sanitation.—These Indians enjoy pretty good health. The sanitary conditions are good.

Occupations.—These Indians take a little more interest in farming. Fishing and hunting and acting as guides for fishing and hunting parties are their chief occupations.

Buildings.—Their dwellings are comfortable, and their other buildings kept in fair condition.

Stock.—They own very little stock, and only of medium quality.

Farm Implements.—They own very few farm implements.

Education.—There is no school on this reserve.

Characteristics and Progress.—They are industrious and law-abiding, and are making very good progress.

Temperance and Morality.—These Indians are temperate and moral.

COMOX BAND.

Reserve.—(Nos. 1, 2 and 3.)—This reserve is situated on the northern shore of Comox harbour and on the left bank of the Pentledge river at its confluence with the Tsolum river.

In connection with the reserve is a graveyard on Goose spit, Comox harbour. The area of the reserve is 378 acres.

Population.—The population of this band is 59.

Health and Sanitation.—The general health of these Indians has been very good. No epidemic has appeared among them. Sanitary precautions are fairly well observed.

Occupations.—These Indians chiefly engage in farming, hunting and fishing.

Buildings.—These Indians have not very many buildings, but what they have are of fair quality.

Stock.—They have a number of fair horses and some cattle.

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Farm Implements.—They do not possess many farm implements, but what they have are fairly well taken care of.

Education.—There is no school on this reserve.

Characteristics and Progress.—These Indians are industrious, and are making very good progress.

Temperance and Morality.—They are temperate, with a few exceptions, and moral.

GALIANO ISLAND BAND.

Reserve.—(No. 9 of the Penelakut band.)—This reserve is located on the north-west extremity of Galiano island, and is included in the area of the reserves of the Penelakut band.

Population.—The population of this band is 32.

Health and Sanitation.—The health of the Indians in this band has been good. Sanitary conditions are fair.

Occupations.—The chief occupations of these Indians are fishing and boat-building.

Buildings.—There are very few dwellings on this reserve.

Stock.—These Indians have no stock.

Farm Implements.—These Indians do not possess farm implements.

Education.—The children attend the Kuper Island industrial school.

Characteristics and Progress.—These Indians are industrious and law-abiding.

Temperance and Morality.—These Indians are temperate and moral.

MAYNE ISLAND BAND.

Reserve.—(No. 6 of the Saanich band.)—This reserve is situated on the north-west extremity of Mayne island. The area of the reserve is included in that of the Saanich bands.

Population.—The population of this band is 26.

Health and Sanitation.—The health of these Indians has been good during the year. The sanitary conditions are fair.

Occupations.—The chief occupations of these Indians are fishing, hunting, and working for the white settlers on the adjoining islands.

Buildings.—As this is only a fishing station, their buildings are mere shanties, constructed of cedar slabs.

Stock.—Their only stock consists of a few sheep.

Farm Implements.—These Indians do not own any farm implements.

Education.—There is no school on this reserve.

Characteristics and Progress.—These Indians are industrious and law-abiding, and make a very good living by fishing.

Temperance and Morality.—These Indians are temperate and moral.

COWICHAN LAKE BAND.

This reserve is situated on the northern shore of Cowichan lake, near its outlet. It has a total area of 130 acres. There is at present only one man and one woman occupying this reserve, and that only during the summer months. They spend their winter among their relatives on the west coast of the island.

GENERAL REMARKS.

The Indians throughout this agency, taken as a whole, are industrious, and making steady progress. Many Indians own splendid carriages, some of them rubber-tired; they also own a number of good driving horses. In fact, their driving equipments are often better than those of the average white settler. Owing to the recent estab-

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lishment of numerous industries on Vancouver island, the Indians have been able to obtain steady and remunerative employment when inclined to work, but, owing to the lack of economy and improvidence, fail to save their money: then others again with a thought of care have handsome sums, bearing interest, deposited in the chartered banks and saving institutions. I wish to express my appreciation of the successful work done by the management of the Kuper island industrial school; and great credit is due the missionaries working throughout the agency for their zealous and indefatigable efforts to improve the spiritual condition of the Indians.

I have, &c.,

W. R. ROBERTSON,

Indian Agent.

BRITISH COLUMBIA,

FRASER RIVER AGENCY,

NEW WESTMINSTER, July 2, 1906.

FRANK PEDLEY, Esq.,

Deputy Supt. General of Indian Affairs,

Ottawa.

SIR,—I have the honour to submit my annual report on the affairs of this agency for the year ended June 30, 1906.

Tribe or Nation.—All the Indians of this agency belong to branches of the Salish nation.

BANDS IN THE CHILLIWACK DISTRICT.

Reserves.—The following bands occupy reserves in close proximity to each other in this district, comprising a total area of 3,841 acres, viz.: Aitchelitz, Kwawkwawapilt, Squialha, Skwah, Skulkayn, Skway, Soowalie, Tzeachten and Yukkwekwioose.

Population.—The total population of these nine bands is 315.

Health and Sanitation.—The health of these Indians during the year has been fairly good. Their villages are kept in a sanitary condition, and nearly all the Indians have been vaccinated.

Occupations.—They engage chiefly in agricultural pursuits, doing also some fishing, hop-picking, and rendering sundry services for their white neighbours.

Buildings, Stock and Farm Implements.—Nearly all their dwellings are of a fairly good class, and are kept clean and in good repair. Their stock is of good breed, and is being improved from year to year. Most families have their own farm implements, and are careful of them.

Education.—Much interest is taken by these Indians in the education of their children, who attend the Coqualeetza Institute, and St. Mary's Mission school.

Characteristics and Progress.—They are, on the whole, fairly industrious and law-abiding, and are making some progress.

Temperance and Morality.—The great majority of them are temperate, and they are also moral.

BANDS ON HOWE SOUND, BURRARD INLET AND SQUAMISH RIVER.

Reserves.—These bands, known as the Squamish Indians, occupy reserves containing a total area of 6,806 acres, and are as follows, viz.: Burrard Inlet, No. 3; Kapilano, Squamish (Howe Sound), Seymour Creek, Mission (Burrard Inlet), and False Creek.

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Population.—The combined population of these six bands is 387.

Health and Sanitation.—The health of these Indians has been good throughout the year. Vaccination has been attended to from time to time, and their villages are kept in a sanitary condition.

Occupations.—The chief occupations of these Indians are fishing, hunting, hand-logging, and loading lumber in ships at the saw-mills. A little farming and gardening is also done by them.

Buildings, Stock and Farm Implements.—The Indians residing on these reserves have fairly good dwelling-houses and outbuildings and keep them in good repair. Their stock is well cared for and of good breed. Their implements are in good condition.

Education.—These Indians appreciate the advantages of education, and, consequently, are more earnest in their desire to have their children educated and send them to the Squamish Mission boarding school.

Characteristics and Progress.—They are a law-abiding and industrious people, and are making steady progress.

Temperance and Morality.—They are a temperate and moral people.

CHEAM BAND.

Reserve.—The reserve of this band contains an area of 1,433 acres, and is situated on the south bank of the Fraser river, about 80 miles from its mouth.

Population.—The population of this band is 101.

Health and Sanitation.—No sickness of a very serious nature appeared amongst them during the year, and their health, generally speaking, has been good. Vaccination has, from time to time, been attended to.

Occupations.—They engage mostly in agricultural and fishing pursuits; they also do some hop-picking and work for their white neighbours.

Buildings, Stock and Farm Implements.—Their dwelling-houses, barns and outbuildings are well constructed, and their stock and farm implements are well cared for.

Education.—They manifest a lively interest in educational matters, and many of the children attend St. Mary's Mission school.

Characteristics and Progress.—The Indians of this band are industrious and law-abiding people, and are making a good living.

Temperance and Morality.—A few of them are fond of liquor, but the majority of them are temperate; they are also moral.

CHEHALIS AND SCOWLITZ BANDS.

Reserves.—These two bands have reserves on Harrison river, which form a combined area of 3,144 acres.

Population.—The population of these two bands is 163.

Health and Sanitation.—During the year their health has been good. Sanitary regulations are well observed in their villages, and vaccination has been attended to.

Occupations.—They earn their living chiefly by fishing, hunting, farming and hop-picking.

Buildings, Stock and Farm Implements.—Their dwellings are good frame structures, as are also their outbuildings, all of which are kept in repair. Their stock and farm implements are well taken care of.

Education.—Much interest is taken by them in the education of their children, some of whom attend St. Mary's Mission boarding school.

Characteristics and Progress.—They are progressing steadily, and are very industrious and law-abiding.

Temperance and Morality.—They are a temperate people, and are also moral.

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COQUITLAM BAND.

Reserve.—On the Coquitlam river, about 6 miles from New Westminster, lies the reserve of this band, which contains an area of 208 acres.

Population.—The population of this band is 26.

Health and Sanitation.—They have had very good health throughout the whole year, and they strictly observe the sanitary regulations. They have mostly all been vaccinated.

Occupations.—These Indians do a great deal of fishing and hunting, and supply game and fish to the New Westminster market; they also fish for the canneries.

Buildings, Stock and Farm Implements.—Their houses are of good structure, and are repaired from time to time. They also take proper care of their stock.

Characteristics and Progress.—They are, on the whole, an industrious and law-abiding people.

Temperance and Morality.—They are fairly temperate and moral.

DOUGLAS, SKOOKUM CHUCK, SAMAHQUAM AND PEMBERTON MEADOWS BANDS.

Reserves.—The reserves of these bands are situated between the head of Harrison lake, along the Lillooet Portage to Pemberton, and contain an area of 7,497 acres.

Population.—The combined population of these four bands is 504.

Health and Sanitation.—They have enjoyed excellent health during the year, there having been no diseases of a serious or contagious nature amongst them. They keep their villages clean and in a sanitary condition, and they have been vaccinated from time to time.

Occupations.—Hunting, fishing, packing, farming and acting as guides to prospectors are their chief occupations. The women make baskets, from the sale of which they materially assist in the support of the family.

Buildings, Stock and Farm Implements.—Their dwellings are mostly all frame, while their barns and stables are chiefly log buildings. The stock, which is of good breed, is well cared for during the winter, and their farm implements are kept under cover when not being used.

Characteristics and Progress.—These Indians are industrious, law-abiding, very good-natured, and strictly honest.

Temperance and Morality.—They are temperate and moral, a few of them only being addicted to the use of liquor.

EWAWOOS AND TEXAS LAKE BANDS.

Reserves.—The reserves of these bands are situated, the former on the south bank of the Fraser river, about 2 miles east of Hope, and the latter on the north bank of the Fraser river, about 7 miles east of Hope. They contain a total area of 893 acres.

Population.—The combined population of these two bands is 59.

Health and Sanitation.—Their health has been fairly good during the year. Their villages are kept clean, sanitary regulations are well observed, and they have been vaccinated from time to time.

Occupations.—They engage particularly in hunting, farming and fishing; a little is also made by them at hop-picking.

Buildings, Stock and Farm Implements.—Nearly all of them have good, comfortable dwellings, and keep them in proper condition. Their stock is similar to that of their white neighbours, and they take good care of their farm implements.

Education.—A lively interest is taken by them in education, and most of the children attend St. Mary's Mission school.

Characteristics and Progress.—They are a simple-minded, good people, and are also industrious and law-abiding.

Temperance and Morality.—They are a temperate and moral people.

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HOPE BAND.

Reserve.—Their reserve is situated on the north bank of the Fraser river, about 100 miles from its mouth, and has an area of 1,400 acres.

Population.—The population of this band is 85.

Health and Sanitation.—They have enjoyed fairly good health throughout the year. Their village is kept in a sanitary condition, and from time to time vaccination has been attended to.

Occupations.—Their chief pursuits are fishing and farming; some hop-picking is also done by them.

Buildings, Stock and Farm Implements.—Their dwellings are nearly all frame buildings, and are well built. Their stock is well cared for during the winter months, and they are also careful of their farm implements.

Education.—A lively interest is taken by these Indians in the education of their children, many of whom attend St. Mary's Mission boarding school.

Characteristics and Progress.—They are industrious and law-abiding, and are progressing in a satisfactory manner.

Temperance and Morality.—They are, with a few exceptions, temperate; and they are also moral.

HOMALCO AND KLAHOOSE BANDS.

Reserves.—The reserves of these bands are situated in the vicinity of Bute inlet, and Malaspina straits, and have a combined area of 4,738 acres.

Population.—The combined population of these two bands is 159.

Health and Sanitation.—Their health has been good. Their villages are kept clean and in a sanitary condition, and nearly all of them have been vaccinated.

Occupations.—Fishing, hunting and logging constitute the chief occupations of these Indians; a small amount of farming is also done by them.

Buildings, Stock and Farm Implements.—The buildings occupied by most of them are fairly good. They have very little stock, and their farm implements consist only of such as are used by hand.

Characteristics and Progress.—They are a kind-hearted, good-natured people, and very seldom ask for assistance of any kind.

Temperance and Morality.—They are a temperate, moral, good people, and are easy to get along with.

KATSEY BAND.

Reserve.—The reserve of this band is situated on the north bank of the Fraser river, about 10 miles from New Westminster, and contains an area of 385 acres.

Population.—The population of this band is 78.

Health and Sanitation.—Their health has been exceptionally good throughout the year. Sanitary matters are well attended to, and they have been vaccinated from time to time.

Occupations.—Their chief occupations are fishing, farming, hunting, and working as farm-hands for white settlers.

Buildings, Stock and Farm Implements.—Their dwellings, barns and stables are fairly good. They take proper care of their stock, and also of their farm implements.

Education.—All the parents are most anxious to have their children educated, a number of whom are attending the Indian boarding school at St. Mary's Mission.

Characteristics and Progress.—They are law-abiding, and very industrious.

Temperance and Morality.—They are temperate and moral, although a few of them are fond of liquor.

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LANGLEY AND WHONOCK BANDS.

Reserves.—The reserve of the Langley Indians is situated on McMillan island, in the Fraser river, about 20 miles east of New Westminster, while the reserve of the Whonock Indians lies about 24 miles east of New Westminster, on the north bank of the Fraser river, and together they comprise a total area of 1,432 acres.

Population.—The total population of these two bands is 67.

Health and Sanitation.—Their health during the year has been very good. Sanitary regulations are well observed, and vaccination has been attended to.

Occupations.—These Indians fish for the canneries during the salmon-canning season, and they also do considerable mixed farming. The Langley band had a very creditable exhibit of farm products at the Dominion Exhibition held in New Westminster last October.

Buildings, Stock and Farm Implements.—They have comfortable dwelling-houses, which they keep in good repair. Their barns and stables are also good, and their stock and farm implements are given the best of care.

Education.—They take an active interest in educational matters, and many of them have been educated in St. Mary's Mission boarding school.

Characteristics and Progress.—They are a good, industrious, and law-abiding people.

Temperance and Morality.—Most of them are strictly temperate, and they are also a moral people.

MUSQUEAM BAND.

Reserve.—The reserve of these Indians lies on the north arm of the Fraser river, about 1 mile from its mouth, and contains an area of 452 acres.

Population.—The population of this band is 98.

Health and Sanitation.—They have enjoyed excellent health throughout the year. Their houses and surroundings are kept clean and in a sanitary condition, and most of them have been vaccinated.

Occupations.—They engage chiefly in fishing and mixed farming.

Buildings, Stock and Farm Implements.—Their dwellings are nearly all frame buildings, and are kept in good repair, as are also their barns and outbuildings. Their stock and farm implements are given proper care.

Education.—They take much interest in education, and send their children to the Coqualeetza Institute, and Kuper Island and Squamish Mission schools.

Characteristics and Progress.—They are a law-abiding and industrious people, and are making fair progress.

Temperance and Morality.—They are, with but few exceptions, temperate, and are also moral.

MATSQUI BAND.

Reserve.—The Matsqui reserve is situated about 30 miles from New Westminster, on the south bank of the Fraser river, and contains an area of 1,072 acres.

Population.—The population of this band is 45.

Health and Sanitation.—Their health has been fairly good during the year; their village has been kept clean and vaccination attended to.

Occupations.—Their chief occupations are fishing and farming, all doing more or less mixed farming.

Buildings, Stock and Farm Implements.—They do not keep their dwellings and outbuildings in very good repair, but they take proper care of their cattle and farm implements.

Education.—They are very much interested in the education of their children, some of whom attend St. Mary's Mission school.

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Characteristics and Progress.—They are industrious, and are making slow progress.

Temperance and Morality.—They are temperate and moral.

NEW WESTMINSTER BAND.

Reserve.—These Indians have reserves at New Westminster and Brownsville, containing a total area of 32 acres.

Population.—The population of this band is 60.

Health and Sanitation.—Their health has been fairly good, and sanitary regulations are carefully attended to in their village.

Occupations.—They engage chiefly in hunting and fishing, and they supply the market at New Westminster with much of the fish and game required throughout the year. They also fish for the canneries during the canning season.

Buildings, Stock and Farm Implements.—Nearly all of them have good, comfortable dwellings. They do very little farming, and do not keep much stock.

Education.—They take a good deal of interest in educational matters.

Characteristics and Progress.—They are an industrious, good people.

Temperance and Morality.—These Indians are, on the whole, temperate and moral, some of them being exceedingly good, although a few of them are addicted to the use of liquor.

NICOMEN AND SKWEAHM BANDS.

Reserves.—The reserves of these bands are situated on the north bank of the Fraser river, about 44 miles from New Westminster, and comprise an area of 636 acres.

Population.—The combined population of these two bands is 44.

Health and Sanitation.—Their health has been fairly good throughout the year. Their villages are kept in a sanitary condition.

Occupations.—Farming and fishing constitute their chief occupations. They do some mixed farming, and also fish for the canneries.

Buildings, Stock and Farm Implements.—Their dwellings and outbuildings are fairly good. They take fairly good care of their stock, and also of their farm implements.

Education.—They do not trouble themselves much about education, and very few of them can read or write.

Characteristics and Progress.—They are a simple-minded people, and follow old customs in many respects. However, they are making some progress.

Temperance and Morality.—Most of them are fond of liquor, but they are fairly moral.

SEMAHMOO BAND.

Reserve.—This reserve fronts on Semiamu bay and borders on the international boundary line. It has an area of 392 acres.

Population.—The population of this band is 34.

Health and Sanitation.—They have enjoyed good health throughout the year. Sanitary conditions are fair, and vaccination has been attended to.

Occupations.—Their chief occupation is fishing; a small amount of mixed farming and gardening being done by each family.

Buildings, Stock and Farm Implements.—Most of them have comfortable dwellings, which are kept in good repair. Their cattle and horses are similar to those of their white neighbours. They have but few farm implements.

Education.—A few of these Indians have attended St. Mary's Mission school.

Characteristics and Progress.—They are an easy-going, simple people, and seldom ask for assistance.

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Temperance and Morality.—Owing to their close proximity to the American boundary, they can easily procure liquor; but on the whole they are temperate, and also moral.

OHAMIL BAND.

Reserve.—The reserve of this band is situated on the south bank of the Fraser river, about 74 miles east of New Westminster, and contains an area of 629 acres.

Population.—The population of this band is 55.

Health and Sanitation.—The health of these Indians has been very good during the past year. Their dwellings and surroundings are kept in a sanitary condition.

Buildings, Stock and Farm Implements.—Their dwellings are comfortable, and are kept clean and in repair. Their stock is of good breed, and they are careful of their farm implements.

Occupations.—They are occupied most of the time in fishing, farming and hop-picking.

Education.—They are very keen in their desire to have their children properly trained in educational matters, and send them to St. Mary's Mission school, and to the public school near their reserve.

Characteristics and Progress.—They are industrious and law-abiding, and are fairly prosperous.

Temperance and Morality.—They are temperate and moral.

POPKUM AND SQUAWTITS BANDS.

Reserves.—These bands occupy reserves situated on the south bank of the Fraser river, about 65 miles east of New Westminster, which contain an area of 5,326 acres.

Population.—The combined population of these two bands is 55.

Health and Sanitation.—Their health has been good, and sanitary regulations are well observed.

Occupations.—Their work consists chiefly of farming and fishing, and most of them work in the hop-fields during the hop-picking season.

Buildings, Stock and Farm Implements.—They have good dwellings, barns and outbuildings. Their stock and farm implements are well cared for.

Education.—Considerable interest is taken by these Indians in education.

Characteristics and Progress.—They are industrious, and behave themselves in a most becoming manner.

Temperance and Morality.—With the exception of a few, they are temperate, and also moral.

SECHELT BAND.

Reserve.—This reserve is situated on the Sechelt peninsula, Malaspina straits, and contains an area of 1,800 acres.

Population.—The population of this band is 230.

Health and Sanitation.—An epidemic of whooping-cough broke out amongst these Indians in the month of December last, resulting in the death of three children. Otherwise, the health of the band was good during the year. The sanitary condition of their village is excellent, and vaccination has been attended to.

Occupations.—Fishing, hunting, logging and a little gardening are the chief occupations of these Indians.

Buildings, Stock and Farm Implements.—These Indians have comfortable dwellings, which they keep in good repair. They do not keep much stock, and have no implements except those used by hand.

Education.—They are much interested in education, and send their children to the Sechelt school, on their reserve.

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Characteristics and Progress.—They are a kind-hearted, simple people, and are easy to get along with. They are very honest in their dealings with their white neighbours and among themselves.

Temperance and Morality.—They are a strictly temperate and moral people, never touching any kind of intoxicants.

SUMASS BAND.

Reserves.—The reserves of the Sumass Indians are situated at Miller's Landing, on the south bank of the Fraser river, and at Upper Sumass on Sumass lake. They contain a total area of 1,370 acres.

Population.—The population of this band is 50.

Health and Sanitation.—Their health has been fairly good; and the sanitary condition of their villages is fair.

Occupations.—Mixed farming and fishing are the chief occupations of these Indians.

Buildings, Stock and Farm Implements.—They have comfortable dwellings, and fairly good barns and stables. Their stock is of good breed, and is well taken care of, and their implements are carefully kept under cover when not in use.

Education.—Only a few of them have ever gone to school, but there is a marked improvement in those who have had this privilege.

Characteristics and Progress.—These Indians are easy-going and rather indolent people, but seldom give any trouble.

Temperance and Morality.—They are, on the whole, a temperate, moral people, only a few of them being fond of liquor.

SLIAMMON BAND.

Reserve.—The reserve of this band is situated on Malaspina straits. It contains an area of 4,712 acres.

Population.—The population of this band is 106.

Health and Sanitation.—Their health has been very good during the year. The sanitary condition of their village is excellent, and vaccination has been attended to.

Occupations.—They engage mostly in fishing, hunting and logging, and only a small amount of farming and gardening is done by them.

Buildings, Stock and Farm Implements.—They have good, frame dwellings, which are being improved from time to time. They do not keep much stock, and their farm implements are only such as are used by hand.

Education.—None of these Indians have ever attended school, but they are very anxious to have their children educated.

Characteristics and Progress.—They are an industrious people, very honest and easy-going, and are obedient to authority.

Temperance and Morality.—They are temperate and moral, although there are a few who are fond of liquor.

SKAWAHLOOK BAND.

Reserve.—The reserve of this band is situated on the north bank of the Fraser river between Ruby creek and Hope, and contains an area of 196 acres.

Population.—The population of this band is 20.

Health and Sanitation.—Their health has been good, and sanitary regulations well observed.

Occupations.—The occupations of this band consist chiefly of fishing and mixed farming.

Buildings, Stock and Farm Implements.—These Indians have fairly good dwellings and outhouses, and take proper care of their stock during winter; they also take good care of their farm implements.

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Characteristics and Progress.—They are a good, law-abiding people, and are on good terms with their white neighbours.

Temperance and Morality.—They are a temperate and moral people.

TCHEWASSEN BAND.

Reserve.—The reserve of this band is situated on the gulf of Georgia, near Point Roberts, and only a short distance from the international boundary line. It contains an area of 604 acres.

Population.—The population of this band is 48.

Health and Sanitation.—Their health has been fairly good during the past year. Their village is kept in a sanitary condition, and they have all been vaccinated.

Occupations.—Farming and fishing are the chief occupations of these Indians. They fish for the canneries during the fishing season, and the remainder of the year they work on their farms.

Buildings, Stock and Farm Implements.—They have fairly good dwellings, barns and stables. Their cattle and horses are of good breed, and their farm implements are given fairly good care.

Education.—Very few of these Indians have received any education.

Characteristics and Progress.—They are a peaceful, good-natured people, and get along well with their white neighbours.

Temperance and Morality.—These Indians are moral; but they are fond of liquor.

YALE BAND.

Reserve.—The Yale reserve is situated on the Fraser river about 112 miles from its mouth, and contains an area of 1,100 acres.

Population.—The population of this band is 82.

Health and Sanitation.—They have enjoyed good health throughout the year, and sanitary regulations are well attended to.

Occupations.—Their occupations consist chiefly of farming, fishing and hunting, and a few of them work as sectionmen for the Canadian Pacific Railway Company.

Buildings, Stock and Farm Implements.—They have comfortable dwelling-houses, and their outbuildings are good. Their stock and farm implements are well cared for.

Education.—They take a lively interest in education, and send their children to St. Mary's Mission and All Hallows schools.

Characteristics and Progress.—They are an industrious, good people, and very seldom give any trouble.

Temperance and Morality.—They are, on the whole, a temperate and moral people.

GENERAL REMARKS.

There are four boarding schools and one industrial school in this agency, viz.: St. Mary's Mission school, near Mission City; Squamish Mission, at North Vancouver; All Hallows, at Yale; Sechelt school, on the Sechelt reserve, and the Coqualeetza industrial school at Chilliwack. These institutions have all been well attended during the year, and the pupils have made very satisfactory progress.

I have, &c.,

R. C. McDONALD,

Indian Agent.

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BRITISH COLUMBIA,
KAMLOOPS-OKANAGAN AGENCY,

KAMLOOPS, July 4, 1906.

FRANK PEDLEY, Esq.,
Deputy Supt. General of Indian Affairs,
Ottawa.

SIR.—I have the honour to submit my annual report on the affairs of this agency for the fiscal year ended June 30, 1906.

Location.—The Kamloops-Okanagan agency is located in and scattered over the greater portion of Yale district, immediately north of the international boundary line; the district contains approximately 24,000 square miles. The agency contains an aggregate acreage of 333,578 acres.

Natural Subdivisions.—The agency is divided naturally, by the rivers which drain it, into the Fraser, Thompson, Nicola, Similkameen and Okanagan districts.

ADAMS LAKE OR HALTKAM BAND.

Reserves.—The reserves of this band are located near the foot of Little Shuswap lake and at Adams lake. They have an area of 7,188 acres, comprised of agricultural, grazing and timber lands.

Population.—The population is 194.

Health and Sanitation.—The health of these Indians during the year has been good. There has been no epidemic among them, and they have had little medical attendance. A great majority of them have been vaccinated; they keep their houses and persons fairly clean.

Occupations.—These Indians, having water for irrigation purposes, have done considerable farming, for which their land is generally well adapted. They raise horses and cattle, and they also fish, hunt and work as labourers.

Buildings.—They have log houses, which are comfortable, but of poor quality.

Stock.—They have good horses for farm and saddle purposes, and some cattle and other stock.

Farm Implements.—They have sufficient farm implements and machinery of various kinds, self-binders, mowers, harrows, ploughs, horse-rakes, and a small threshing-machine.

Education.—They have no schools, but some children attend the Kamloops industrial school, and some can read and write shorthand Chinook.

Characteristics and Progress.—These Indians are industrious, and are making rapid progress in farming. They are law-abiding, peaceable people.

Temperance and Morality.—They are usually temperate and moral, and they seldom indulge in intoxicants.

ASHCROFT OR STLAHL BAND.

Reserves.—The reserves of this band, numbering three, are situated on a plateau on the right bank of the Thompson river, opposite the town of Ashcroft, and at McLean's lake. They contain an aggregate area of 5,234 acres, comprising agricultural, grazing and timber lands.

Population.—The population of the band is 45.

Health and Sanitation.—The health of these Indians has been fair. There has been no epidemic, and sanitation is good. The Indians have been vaccinated. Their houses are deserted in the summer, and they have good water.

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Occupations.—They carry on a system of mixed farming and stock-raising. They have a limited supply of water for irrigation. They fish and hunt and are employed as freighters and packers, and as cowboys.

Buildings.—They have a primitive class of log buildings. A few good dwellings have been erected recently.

Stock.—They have some good horses and cattle. They use the horses mostly for riding and packing.

Farm Implements.—They are fairly well equipped with farm implements.

Education.—There are no schools among them.

Characteristics and Progress.—They are industrious, but they are not able to earn much. They have improved the reserve greatly.

Temperance and Morality.—They are fairly temperate and moral.

BONAPARTE OR TLUHTAUS BAND.

Reserves.—The reserves of this band, numbering five, are located on the Thompson river and the Bonaparte river, on Hat creek and Loon lake. They contain approximately 61,113 acres.

Population.—The population is 160.

Health and Sanitation.—The general health of these Indians has been good. No epidemic has visited them. Many have been vaccinated; their houses are not very cleanly. In the summer season they do not live in the houses.

Occupations.—They raise some farm produce on Hat creek, and have a number of horses and cattle, but they live mostly by fishing and hunting, and working as cowboys on ranches.

Buildings.—They have very fair log buildings. The chief has a good house, and they have a fine church building.

Stock.—They have some horses, mostly saddle horses, and some cattle.

Farm implements.—They have sufficient farm implements.

Education.—The only means of education is afforded them at the Kamloops industrial school. Some of them know shorthand Chinook.

Characteristics and Progress.—They are good workers, but are somewhat nomadic in habits. They are improving the reserve.

Temperance and Morality.—They were once much addicted to the use of intoxicants, but they have improved greatly with the stricter enforcement of the Liquor Act.

BOOTHROYD (SUUK, KAMOOS, NKATSAM AND CHINOOK) BAND.

Reserves.—The reserves of this band, numbering ten, are located mostly on the left bank of the Fraser river. They contain an area of 1,600 acres. The greater portion of the land is timbered and rocky, though some, when cleared, makes good farming land.

Population.—The population of this band is 154.

Health and Sanitation.—There has been no epidemic among these Indians. They have been vaccinated, and their houses are fairly clean.

Occupations.—They raise considerable quantities of vegetables and fruit. They fish, hunt, trap, and work as labourers on the railroad.

Buildings.—They have a fair class of log houses, which they are constantly improving.

Stock.—They have some saddle and pack horses, and they have better cattle than are usually found along the Fraser.

Farm Implements.—They have sufficient implements for their needs.

Education.—They have no means of education.

Characteristics and Progress.—They are industrious, and are good workers. Those at Nkatsam are well-to-do.

Temperance and Morality.—They are very temperate and moral.

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BOSTON BAR BAND.

Reserves.—The reserves of this band number seven, and are located around Boston Bar, North Bend and Scaucy. They contain 628 acres, mostly rocky land, with a few small patches of tillable land.

Population.—The population of this band is 146.

Health and Sanitation.—There has been no epidemic among them, and they keep their houses fairly clean. They get little medical assistance. Sanitary conditions are good.

Occupations.—They grow hay, fruit and vegetables. They live chiefly by mining, hunting, fishing, and working on the railway. The women weave baskets.

Buildings.—At North Bend they have a good class of buildings, mostly frame; elsewhere the buildings are not so good.

Stock.—They have a number of saddle and pack horses, but few cattle. They winter their stock in Nicola generally.

Farm Implements.—They have enough for their needs.

Education.—They have no means of education other than that provided by the Kamloops industrial school.

Characteristics and Progress.—They are steady, hard-working Indians, but they cannot accumulate much.

Temperance and Morality.—They compare favourably with other bands in this respect.

COOK'S FERRY BAND.

The reserves of this band, fifteen in number, are located on both banks of the Thompson river, around Cook's Ferry and Spatsum, and in the Tuile and Highland valleys. They consist of bench-lands along the river, and higher up sparsely timbered land. They contain 9,110 acres.

Population.—The population of this band numbers 185. Fifteen were killed in a landslide at Cook's Ferry.

Health and Sanitation.—No epidemic has appeared among them. Sanitation is good, and they have been vaccinated.

Occupations.—They carry on mixed farming and stock-raising, fish and hunt a little, and work as labourers and cowboys.

Buildings.—Their buildings are mostly of logs, and so cannot be classed as good.

Stock.—They have a number of good horses for farming and saddle purposes, and some have cattle, pigs and sheep.

Farm Implements.—They are well supplied with implements.

Education.—They have no system of education.

Characteristics and Progress.—They are industrious, but around Cook's Ferry they do not make much progress. On Pemynooos some are well-to-do. They are peaceable Indians.

Temperance and Morality.—They are temperate and moral.

DEADMAN'S CREEK OR STICHISTAN BAND.

Reserve.—The reserve of this band is situated on Deadman's creek. It contains an area of 20,134 acres, comprising farming, grazing and timber lands.

Population.—The population of this band is 122.

Health and Sanitation.—The general health of these Indians has been good, and no epidemic has appeared. Their small, mud-roofed houses do not admit of good ventilation. During summer they are not occupied, and sanitary conditions are good.

Occupations.—They farm a little, raise some stock, chiefly horses, fish, hunt, and work as labourers.

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Buildings.—They have log buildings, mud-roofed. They are warm in winter, but do not admit of good ventilation.

Stock.—They have a number of horses, chiefly saddle horses, and a few cattle.

Farm Implements.—They have sufficient farm implements.

Education.—They have no schools, but some have attended the Kamloops industrial school.

Characteristics and Progress.—They are industrious, and are considered good cowboys. They keep the irrigation ditch in good repair, and do some farming.

Temperance and Morality.—During the year these Indians have been little addicted to intoxicants.

KAMLOOPS BAND.

Reserves.—The reserves of this band, five in number, are situated at the confluence of the North and South Thompson rivers, opposite the city of Kamloops. They contain an area of 33,379 acres, comprised of good agricultural, grazing, timber and meadow lands.

Population.—The population of this band is 242.

Health and Sanitation.—The general health has been good. No epidemic has visited them, they have been vaccinated, and every year more attention is paid to the cleanliness of houses and persons. They have pure running water.

Occupations.—They grow considerable hay and vegetables. They raise stock, fish, hunt, and work as cowboys.

Buildings.—The older buildings are in poor order. The new ones are very up-to-date, larger and better lighted.

Stock.—They have large herds of horses, and some cattle. They sell a good number of their horses.

Farm Implements.—They have a good supply of wagons, buggies, ploughs, mowers, rakes, harness and saddles.

Education.—Many children attend the industrial school on the reserve.

Characteristics and Progress.—They are industrious, but move around considerably. They make a good living.

Temperance and Morality.—Many of the Indians have a fondness for intoxicants, which can easily be procured in the city. However, the guilty Indians are generally punished, so they are more cautious about drinking. In all other respects they are moral.

KANAKA BAR BAND.

Reserves.—The reserves of this band, numbering four, are located on both banks of the Fraser, 10 miles below Lytton. Their area is 500 acres.

Population.—The population of this band is 55.

Health and Sanitation.—No epidemic has appeared among them. Their houses are small and poorly ventilated, and are not very clean.

Occupations.—They grow little on their land. Their chief occupations are fishing and mining.

Buildings.—They have a poor class of buildings.

Stock.—They have a few saddle and pack horses, and a few cattle.

Farm Implements.—They have sufficient for their needs.

Education.—They have no means of education.

Characteristics and Progress.—Some of them are hard-working, but they make little progress. They are peaceable and law-abiding.

Temperance and Morality.—They are temperate and moral.

LYTTON BAND.

Reserves.—The reserves, twenty-seven, of this band, which is composed of several small bands, lie along both banks of the Fraser from Lytton to Nesikeep, 25 miles above.

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They contain an area of 10,292 acres, composed of table-land and mountain slopes, where fruits and vegetables grow well.

Population.—The population of this band is 460.

Health and Sanitation.—There has been no epidemic; they have been vaccinated, and sanitary conditions are good. Their houses are roomy and well lighted.

Occupations.—They are able to grow a good deal of hay, grain and vegetables. They raise stock, fish and hunt, mine and work as labourers in various capacities.

Buildings.—They have a fair class of buildings.

Stock.—They have some good work, saddle and pack horses, and some cattle.

Farm Implements.—They have a good supply of these.

Education.—They have no means of education, except at All Hallows, Yale, and St. George's school.

Characteristics and Progress.—They are hard-working Indians, and make good progress in agriculture.

Temperance and Morality.—They are temperate and moral.

NICOMEN BAND.

Reserves.—The reserves of this band, five in number, are situated along both banks of the Thompson river, between Lytton and Cook's Ferry. They contain an area of 2,976 acres, consisting of very poor bench and mountain lands.

Population.—The population of this band is 49.

Health and Sanitation.—No epidemic has visited them, and the general health has been good. They have been vaccinated, and sanitary conditions are good.

Occupations.—They raise small quantities of grain, hay and vegetables; fish and hunt, and raise a little stock. They also mine for gold considerably.

Buildings.—Their log buildings are of a fair quality.

Stock.—They raise some pack and saddle horses, and a few cattle.

Education.—They have no means of education.

Characteristics and Progress.—These Indians seem to be industrious, but they make little progress.

Temperance and Morality.—They are temperate and moral.

NICOLA (LOWER) BAND.

Reserves.—The reserves, thirteen, of this band, are located along the Nicola river from near its mouth to Nicola lake. Hamilton Creek reserve is also included. The area is 3,191 acres, containing good farming and grazing lands.

Population.—The population is 365.

Health and Sanitation.—No epidemic has appeared among them, their general health has been good, and they have been vaccinated. Their houses are well kept and ventilated.

Occupations.—They farm a little, and raise stock extensively. They fish and hunt, and work as labourers. They do considerable freight-hauling between Cook's Ferry and the Similkameen.

Buildings.—They have a good class of buildings.

Stock.—They have good herds of fine horses, and some good cattle. They have good stallions and mares for breeding.

Farm Implements.—They are well supplied with the farm implements usually required.

Characteristics and Progress.—They are very industrious. Those on the Mammet reserve are the most advanced in cultivating their land. They are all law-abiding.

Temperance and Morality.—They are temperate and moral.

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NICOLA (UPPER) OR SPAHAMIN BAND.

Reserves.—The reserves, eight in number, of this band are located near the head of Nicola lake and around Douglas lake. They have an area of 30,888 acres, comprising good farming and grazing lands.

Population.—The population of this band is 190.

Health and Sanitation.—No epidemic has visited these Indians, and their health has been good. Sanitation is good.

Occupations.—These Indians carry on mixed farming and extensive stock-raising. They hunt, fish and work as cowboys.

Buildings.—They have a good class of buildings.

Stock.—They have large herds of horses and cattle.

Farm Implements.—They have sufficient implements.

Education.—They have no schools. Some have attended the Kamloops industrial school.

Characteristics and Progress.—They are very industrious. Many of them are well off and up to date.

Temperance and Morality.—They are very temperate and moral.

NESKAINLITH OR HALANT BAND.

Reserves.—The reserves, three, of this band are located on the Thompson river near Shuswap lake. They contain an area of 6,996 acres, composed of good farming and grazing lands.

Population.—The population of this band is 152.

Health and Sanitation.—Their general health has been good. No epidemic has appeared, and sanitary conditions are good.

Occupations.—They farm extensively, and raise stock. They fish, hunt, and work as labourers. They live chiefly by farming.

Buildings.—They have a fair class of buildings.

Farm Implements.—They are well supplied with implements.

Characteristics and Progress.—They are law-abiding and industrious. They are making good progress in farming.

Temperance and Morality.—They are temperate and moral.

NORTH THOMPSON OR CHUCHUQUALK BAND.

Reserves.—The reserves of this band are situated on the North Thompson river, about 50 miles above Kamloops. They have an area of 3,239 acres, composed of good farming and timber lands.

Population.—The population of this band is 130.

Health and Sanitation.—No epidemic has visited them. Their houses are not very roomy or well ventilated.

Occupations.—They farm to some extent, mostly hay and vegetables. They raise some stock, fish and hunt, and are employed as packers and cowboys.

Buildings.—They have a poor class of buildings. Lumber is scarce among them.

Stock.—They have some fairly good horses and cattle.

Farm Implements.—They have sufficient of such.

Education.—They have no schools. Some have attended the Kamloops industrial school.

Characteristics and Progress.—They are industrious, but nomadic. They are peaceable and law-abiding.

Temperance and Morality.—They are highly temperate and moral.

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OKANAGAN OR NKAMAPLIX BAND.

Reserves.—The reserves of this band, ten in number, are located around the head and both sides of Okanagan lake. They have an area of 29,790 acres of good farming and timber lands.

Population.—The population of this band is 232.

Health and Sanitation.—No epidemic has appeared among them, and the general health has been good. Sanitary conditions around the village are good.

Occupations.—They farm extensively, fish, and work as farm-hands, cowboys and hop-pickers.

Buildings.—They have a very fair class of buildings.

Stock.—They have a number of horses adapted for all purposes, and some cattle.

Farm Implements.—They are well supplied with farm implements, including self-binders and a steam thresher.

Education.—They have no schools. Some attend the Kamloops industrial school.

Characteristics and Progress.—They are industrious, and they farm well. Some of them are wild and reckless. They do not make much profit from farming.

Temperance and Morality.—Some of them use intoxicants when they can procure them. Such infractions, however, are punished. They are as moral as Indians generally are.

OREGON JACK CREEK (PASCO NEPA) BAND.

Reserves.—The reserves of this band, numbering seven, are located on both sides of the Thompson river, a short distance below Ashcroft, and on Oregon Jack creek. The area is 32,168 acres. There are some fruit-raising and farming lands, but mostly grazing lands.

Population.—The population of this band is 19.

Health and Sanitation.—No epidemic has visited them. Their houses are clean, and other sanitary conditions are good. They have been vaccinated.

Occupations.—They grow cereals, vegetables and fruit and raise stock. They fish, hunt, and work as labourers.

Buildings.—The old buildings are of logs. The newer ones are much better in construction.

Stock.—They have a number of horses and some cattle.

Farm Implements.—They are well supplied with implements.

Education.—They have no schools.

Characteristics and Progress.—They are fairly industrious. The fruit they raise finds a ready market.

Temperance and Morality.—They are temperate and moral. They are law-abiding.

PENTICTON BAND.

Reserves.—The reserves of this band, numbering three, are located at the foot of Okanagan lake, No. 3 being 12 miles from No. 1; they contain good meadows, farming and grazing lands. The area is 48,694 acres.

Population.—The population of this band is 158.

Health and Sanitation.—No epidemic has visited these Indians. Their houses are well kept and sanitation is good.

Occupations.—They engage in farming, stock-raising and fruit-growing; fish, hunt, freight and pack, and work as cowboys.

Buildings.—The buildings recently built are comfortable.

Stock.—They have some horses and cattle of good quality.

Farm Implements.—They have sufficient implements.

Education.—There are no schools.

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Characteristics and Progress.—They are industrious, and many are well-to-do. They grow considerable fruit.

Temperance and Morality.—They are temperate and fairly moral.

SHUSWAP (LITTLE LAKE) OR KUANT BAND.

Reserves.—The reserves, five in number, of this band are located at the head of Little Shuswap lake and on Salmon arm. The area is 7,840 acres, much of it timbered. Around the head of the lake there is some grazing land.

Population.—The population of this band is 88.

Health and Sanitation.—There has been no epidemic, and the general health has been good. Sanitation is good.

Occupations.—They farm a little, raise some stock, fish and hunt, sell wood, and work as labourers.

Buildings.—They have a good class of log buildings.

Stock.—They have a few horses and cattle.

Farm Implements.—They have sufficient implements.

Education.—There are no schools among them.

Characteristics and Progress.—They are very industrious and law-abiding, and are clearing good farms for themselves.

Temperance and Morality.—They are temperate and moral.

SIMILKAMEEN, LOWER AND UPPER BANDS (CHUCHUWAYNA, ASNNOLA AND SHENNOQUANKIN).

Reserves.—The reserves of this band, numbering seventeen, are located along the Similkameen river, from the boundary line to Princeton. The area of the lower reserves is 19,472 acres, that of the upper is 6,438 acres, containing good bottom, bench and grazing lands.

Population.—The population of the lower band is 132, and the population of the upper is 47.

Health and Sanitation.—The health of these bands has been good. No epidemic has appeared, and sanitation is good. They have been vaccinated.

Occupations.—They farm and raise stock extensively, fish and hunt, pack, and work as labourers.

Buildings.—They have a fair class of log buildings.

Stock.—They have a number of fair horses and cattle.

Farm Implements.—They have all necessary implements.

Characteristics and Progress.—They are industrious and law-abiding, and they make good progress in farming.

Temperance and Morality.—They are temperate and moral.

SISKA BAND.

Reserves.—The reserves of this band, numbering seven, are located on the Fraser river, a short distance below Lytton. The area is 559 acres, mostly unproductive.

Population.—The population of this band is 30.

Health and Sanitation.—No epidemic has appeared. Their houses are small and poorly ventilated.

Occupations.—They produce little from their land. They hunt and fish.

Buildings.—They have a poor class of buildings.

Stock.—They have little stock. They have some saddle horses.

Farm Implements.—They can use few.

Characteristics and Progress.—They just manage to get a living. They are law-abiding.

Temperance and Morality.—They are temperate and moral.

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SKUPPA BAND.

Reserves.—The reserves of this band are on the left bank of the Fraser between Lytton and Siska. They have an area of 268 acres, and are capable of producing little.

Population.—The population of this band is 17. Other statistics are included in the Lytton band, with which they are identified.

SPALLUMCHEEN BAND.

Reserves.—The reserves of this band, three in number, are located on the Spallumcheen and Salmon rivers. There are some good pasture-lands on the Salmon river. The area is 679 acres, comprising agricultural and timbered lands.

Population.—The population of this band is 150.

Health and Sanitation.—No epidemic has visited them. Their houses are clean, and they have been vaccinated.

Occupations.—They farm extensively, fish and hunt, and work as labourers. They live chiefly by farming.

Buildings.—They have a good class of buildings.

Farm Implements.—They are well equipped with implements.

Education.—They have no schools.

Characteristics and Progress.—They are very industrious, and most of them are well-off. They are civilized. They are peaceable and law-abiding.

Temperance and Morality.—They are exceptionally temperate and moral.

SPUZZUM BAND.

Reserves.—The reserves, numbering six, of this band, are on the Fraser river, some distance above Yale. They have an area of 456 acres, containing some tillable land.

Population.—The population of this band is 158.

Health and Sanitation.—No epidemic has appeared, and their health has been good. They have been vaccinated.

Occupations.—They grow small quantities of hay, fruit and vegetables. They also fish and hunt.

Buildings.—They have a fair class of buildings.

Stock.—They have a few pack and saddle horses.

Farm Implements.—They have sufficient for their needs.

Education.—They have no schools. Some attend at Spuzzum station and at All Hallows, Yale. They make good progress.

Characteristics and Progress.—They are industrious and law-abiding. Their means of living are few, and progress is slow.

Temperance and Morality.—They are temperate and moral.

COLDWATER BAND.

Reserves.—The reserves, three in number, of this band are located on the Coldwater river, in the Nicola valley. They have an area of 6,276 acres, mostly farming and grazing lands.

Population.—The population of this band is 110.

Health and Sanitation.—No epidemic has appeared among them, and the general health has been good. Sanitation is good, and they have been vaccinated.

Occupations.—They farm, raise stock, fish and hunt, freight and pack, and work as labourers.

Buildings.—They have a very good class of buildings.

Stock.—They have a number of good horses and cattle.

Farm Implements.—They are well supplied with these.

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Education.—There are no schools. Some have attended the Kamloops industrial school.

Characteristics and Progress.—They are industrious, steady and law-abiding. They are making good progress in farming.

Temperance and Morality.—They are highly temperate and moral.

GENERAL REMARKS.

The Indians of this agency are steadily advancing in farming and stock-raising. They are also improving in dress and personal appearance, and in their domestic life. The Indian women are industrious, and render help in every kind of industry.

The Kamloops industrial school has fully maintained its reputation during the year as a useful institution. Every year numbers of applicants have to be refused admission on account of the crowded state of the school. The staff of teachers and instructors is efficient and painstaking.

The industrial school for boys at Lytton continues to do good work, and the attendance has considerably increased. The building is up to date in all respects, and the management is efficient and thorough. I am pleased to note the interest taken in these boys by the principal and his wife.

The Indian hospital at Lytton, with its increased accommodation, has rendered good service to the Indians.

I have, &c.,

A. IRWIN.

Indian Agent.

BRITISH COLUMBIA,

KOOTENAY AGENCY,

FORT STEELE, July 2, 1906.

FRANK PEDLEY, Esq.,

Deputy Supt. General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my annual report on the affairs of this agency for the year ended June 30, 1906.

Location of Agency.—The agency is situated in the southeast portion of British Columbia, and is bounded by the Rocky mountains on the north and east, by the states of Montana, Idaho and Washington on the south, and by the Okanagan agency on the west.

ST. MARY'S BAND, NO. 1.

Reserve.—The reserve of the St. Mary's band, situated on the Kootenay river near Fort Steele, contains 17,425 acres of bottom and bench land. The Isidore ranch, near Fort Steele Junction, a station on the Crow's Nest railway, has an area of 680 acres. The Bummer Flat hay reserve, on the left bank of the Kootenay river, has an area of 190 acres. The reserve at the Kootenay industrial school contains 33 acres of good arable land, nearly all under cultivation, and the agency office reserve at Fort Steele, 11½ acres.

Population.—The population of this reserve is 216.

Health and Sanitation.—There has been no epidemic during the year, and the deaths that occurred were amongst the old and infirm and the very young children. The conditions at the village of St. Eugene continue to improve. Neat cottages are

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being built from time to time, the streets are kept clean and the refuse removed and burned, and the Indians generally live better, the food being cooked with care, and the clothing is suited to the climatic changes.

Occupations.—The Indians engage in farming, stock-raising, packing, trapping, hunting, fishing, and in the winter a number find employment in the logging camps. Others are employed in hauling ties to the railway, and in spring find work amongst the white settlers, fencing and breaking new land.

Buildings.—During the year, those who could afford it, built comfortable cottages at St. Eugene village, which are well lighted and ventilated, and are very comfortable. The dwellings on the reserve are principally of logs, and are fairly well built.

Stock.—The cattle owned by the Indians are of a very good class, which they are trying to improve by the purchase or exchange of good bulls. Of late years their horses have been greatly improved. They realize that the demand is for larger and heavier animals, which it pays to raise.

Farm Implements.—The supply of mowers, rakes, ploughs, harrows, wagons and sleighs is sufficient for their present requirements.

Education.—The Kootenay industrial school at St. Eugene Mission, is under the care and direction of the Rev. N. Coccola, O.M.I., as principal, and the Rev. James Wagner, O.M.I., as vice-principal, with the Sisters of Charity as teachers and assistants. The work done at the institution is most praiseworthy, and the progress has been satisfactory. The staff discharge their duties faithfully and zealously, and the parents of the pupils appear to take a great interest in the work by their frequent visits to the school. The pupils during the year have been free from sickness and appear healthy and happy. Many strangers visited the institution during the year, and expressed great surprise and pleasure at the work done by the pupils.

Characteristics and Progress.—The Indians of the band are fairly industrious. The young men, especially, are always anxious to get work, so that they can make a good living.

Temperance and Morality.—With a very few exceptions, they are a temperate and a good-living and moral band.

TOBACCO PLAINS BAND, NO. 2.

Reserve.—The reserve is situated near the state of Montana at the international boundary, and contains 10,500 acres of prairie and open-timbered land, a good deal of which can be brought under cultivation, but would require irrigation.

Population.—The population of the band is 60.

Health and Sanitation.—The health of the Indians has been good, and the deaths that occurred were from old age and consumption. The Indian village on the reserve is on an ideal site, where the sanitary conditions are excellent, free from malarial surroundings.

Occupations.—These Indians follow farming, stock-raising principally. They do some hunting, trapping and fishing.

Buildings.—Their houses, stables and barns are of logs, as lumber is so expensive and difficult to obtain, but conditions are changing, and saw-mills are being built within a reasonable distance from the reserve, where in future they can purchase a supply at fair prices, so as to enable them to improve their dwellings.

Stock.—Their stock consists of horses and cattle, which they are gradually improving.

Farm Implements.—They are now fairly well supplied with ploughs, harrows, rakes, mowers and wagons, which they are adding to as their means permit.

Characteristics and Progress.—They continue to improve their farms by putting up new fences, repairing the old, and by extending and enlarging their irrigation ditches. One or two new dwellings have been built during the year, which are an improvement upon the old ones.

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Temperance and Morality.—With the exception of one or two Indians, they are a very temperate and moral band. The chief and headmen do all they can to prevent the introduction of intoxicants on the reserve.

LOWER COLUMBIA LAKE BAND, NO. 3.

Reserve.—The reserve is located in the Windermere district, between the Fairmont and Windermere lakes, on the headwaters of the Columbia river, and has an area of 8,456 acres. The land is open-timbered, and slopes gradually towards Lake Windermere. There are several small creeks running through the reserve, which are utilized by the Indians for irrigation.

Population.—The population of the band is 82.

Health and Sanitation.—The health of the Indians has been good. They live much better than formerly, and they keep themselves well and comfortably clothed, which accounts for the absence of sickness amongst them.

Occupations.—They depend chiefly on farming and stock-raising as a means of living. A few still follow hunting and trapping. Many of the young men are employed cattle-herding and branding for settlers in the district.

Buildings.—Their dwellings are mostly of logs. During the year a comfortable frame house was put up by one of the Indians, and the work was done by an ex-pupil of the industrial school, of which the owner is very proud, and I look forward to others following his example by erecting cottages upon their farms.

Farm Implements.—These Indians are well equipped with mowers, rakes, wagons, sleighs, ploughs and harrows, which are carefully looked after when not in use.

Stock.—No band in the agency has improved its cattle and horses more than this one. It owns several good stallions and bulls, and its stock shows advancement and breeding. Its horses are in demand and bring good prices, and are sought after for the Alberta and Saskatchewan markets.

Characteristics and Progress.—These Indians continue to improve their farms by erecting new fences, renewing their old ones, and by farming intelligently, and housing and saving their hay and grain.

Temperance and Morality.—They have the reputation of being a temperate and moral people, and I seldom have any complaints as to their conduct.

LOWER KOOTENAY BAND, NO. 4.

Reserve.—The reserve is situated in the West Kootenay district near the town of Creston, on the line of the Crow's Nest railway, and about 3 miles north of the international boundary, Idaho. It has an area of 1,831½ acres. It is subject to overflow from the Kootenay river. The low land grows excellent wild or swamp hay, which is used for winter feeding. The bench-land is heavily timbered, and difficult to clear, but when cleared is very productive, and is good for grain, fruit and vegetables.

Population.—The population of the band is 166.

Health and Sanitation.—Since the new Indian village was established and a better class of houses built there, the sanitary conditions are much improved. The health of the band has been fairly good. No disease of a contagious nature has appeared amongst them during the year.

Occupations.—Cattle and horse-raising are their principal occupations. A number trap, hunt and fish. Others put in little gardens on the bench-land, and along the river bank where the land does not overflow. During the berry season the majority move to Kootenay lake, where they are employed by the ranchers and fruit-raisers picking and packing fruit for shipment to Alberta, Saskatchewan and Manitoba. Saw-mills have been recently erected near Creston, and I hope to see a number of the Indians employed around them.

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Buildings.—The houses on the reserve are very good log buildings. They are comfortable, and fairly well kept. The Indians have also a number of cattle-sheds which are used for storing hay.

Stock.—They own several herds of cattle, which they carefully look after in the winter. The horses are mostly Indian ponies, and very little effort has been made to improve the breed.

Farm Implements.—These Indians are fairly well supplied with mowers, rakes, ploughs, harrows, some wagons and a few sleighs.

Characteristics and Progress.—They show steady progress. They are discarding the Indian style of clothing, and adopting that of the whites, and many dress neatly and comfortably. During the year a new picket fence was erected around the church and graveyard. The work was done by the Indians, under the superintendence of a foreman.

Temperance and Morality.—There were a few cases of intemperance reported during the year, but the majority are noted for their good conduct and excellent morals.

SHUSWAP OR KINBASKET'S BAND, NO. 5.

Reserve.—The reserve is situated on the right bank of the Columbia river, near the towns of Athlmar and Windermere, and has an area of 2,759 acres. The land is admirably adapted for raising grain, fruit and vegetables, and is well supplied with water for irrigation.

Population.—The population of the band is 62.

Health and Sanitation.—The Indians were free from sickness during the year. They live much as their white neighbours do, cook their food properly and dress neatly and comfortably.

Occupations.—Their principal occupation is farming and stock-raising. A few hunt, fish and trap. Some of the young men are employed by the settlers herding cattle. Others follow packing to and from the mines in the district.

Buildings.—Their dwellings are of hewn logs, and are neat and warm. A few have frame houses, well lighted and ventilated. They have also good stables, sheds and barns.

Stock.—They own a band of cattle and horses, which they are improving from time to time.

Farm Implements.—They are well provided with up-to-date farm implements, which when not in use are carefully looked after and put away.

Characteristics and Progress.—The Indians of the band are good farmers. They keep their fences in repair, irrigate their land properly, understand the value of routine cropping and summer-fallowing. A few are devoting attention to fruit culture, which they are likely to make a success.

Temperance and Morality.—I am pleased to report that only one or two of the band are given to the use of intoxicants. The majority live good, moral and upright lives, and are a law-abiding people.

ARROW LAKE BAND, NO. 6.

Reserve.—The reserve is in West Kootenay and is situated on the west side of Arrow lake, and has an area of 255 acres. The soil is best adapted for vegetables and fruit.

Population.—The population of the band is 25.

Health and Sanitation.—The health of the band has been good during the past year. During the summer they live in tents, move frequently from place to place, so that the sanitary conditions are excellent.

Occupations.—They hunt, fish, trap, pick berries, clear land for the settlers along the lake, and the women make moccasins and gloves, which are in demand by the prospectors.

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Buildings.—Their houses are comfortable, well lighted and convenient.

Stock.—They have no stock of any kind. Their location is unsuited for keeping any.

Farm Implements.—These consist of spades, hoes and rakes.

Characteristics and Progress.—They are industrious and save their earnings. They are improving their little farms by clearing more land, grubbing and fencing it. They bear an excellent character amongst their white neighbours, who speak highly of their conduct.

Temperance and Morality.—They are a temperate and moral-living band.

GENERAL REMARKS.

I am pleased to report that the ex-pupils of the industrial school are getting along satisfactorily, and are a great assistance to their relatives on the different reserves. They are well-behaved, and do their work intelligently, and are making a good living for themselves and their families.

I cannot close the report without bearing testimony to the support I have had from the Rev. James Wagner, O.M.I., the zealous and devoted missionary in charge of the Indians, who is ready and willing at all times to give me his valuable aid and assistance; and also to Dr. Hugh Watt, the medical attendant, who has proved himself very faithful in the discharge of his duty.

I have, &c.,

R. L. T. GALBRAITH.

Indian Agent.

BRITISH COLUMBIA.

KWAWKEWLTH AGENCY.

ALERT BAY, June 30, 1906.

FRANK PEDLEY, Esq.,

Deputy Supt. General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my annual report on the affairs of this agency for the fiscal year ended June 30, 1906.

Location of Agency.—This agency extends from Cape Mudge on the south to Smith's inlet on the north, including all the islands between these points: the mainland from Bute inlet to Smith's inlet; the east side of Vancouver island from the 50th parallel to Cape Scott, the extreme northwest point of Vancouver island; and also the west side of Vancouver island from and including Quatsino sound to Cape Scott.

Nation.—These Indians all belong to the Kwawkewlth nation, which at present consists of fifteen tribes, some of the smaller tribes reported years ago having amalgamated with other tribes. These tribes all speak the same language, the Kwawkwalla, with some slight differences of minor importance.

Reserves.—The fifteen tribes have ninety reserves and fishing stations, aggregating 17,052 acres, or about 13 acres per capita of population. Although nearly all the reserves are heavily timbered, the soil is for the most part rocky and unfit for agricultural purposes. Some small patches of river bottom will make good agricultural land when cleared.

Population.—The population of all the bands in this agency is as follows: Koskimo, 74; Klawatsis, 105; Kwatsino, 21; Quashella, 35; Kwawkewlth, 78; Kwiahkah,

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26; Mamalillakulla, 108; Nakwakta, 90; Ninkish, 134; Nuwitti, 69; Tanakteuk, 94; Tsawataineuk, 226; Wawlitsum, 39; Wiwai-ai-kum, 72; Wiwaiakai, 86; making a total of 1,257.

Health and Sanitation.—The health of these Indians during the past year on the whole has been fairly good. There has been no general epidemic of any kind, yet it will be seen that there has been a slight decrease in population due to the fact that consumption has claimed its usual quota of victims, while whooping-cough and measles took off a number of the children.

Occupations.—The principal occupation of these people is fishing. During the salmon-fishing season they nearly all go to the various canneries, even the women and children taking part. In the spring, commencing about April 10, the oulachons run in the rivers at the head of Kingcome and Knight's inlet, and these little fish are treated for the oil they contain. This oil is used largely by all the Indians as an article of food, and is sold readily among themselves, and constitutes a source of revenue to those engaged in the industry. A number of bands have members engaged in hand-logging on their own account, while others are employed in the regular logging camps. Others act as guides and canoe-men to cruisers, surveyors and prospectors. Many of the women manufacture mats, baskets, &c., from cedar bark and small boughs.

Buildings.—On the whole, the buildings in this agency are not of a very high class. At Alert Bay there are several very fair frame buildings, and in several of the other villages there are a few frame houses. The great majority of the buildings are large shacks made of split cedar boards supported by huge logs. There seems to be a want of incentive to construct good buildings, and it is to be hoped that in the near future a great improvement may be noticed along this line.

Stock.—There is practically no stock in the agency. At most of the villages a few poultry are kept, and at Alert Bay they have an inconsiderable herd of cattle.

Farm Implements.—There are no farm implements with the exception of one plough, which is at Salmon river on the reserve at Wawlitsum, but which is very little used.

Education.—At Alert Bay there are three schools; an industrial school, presided over by Mr. A. W. Corker; a girls' home, which at present is closed, but which is to be reopened at the close of the fishing season; and a day school. At the industrial school the older boys are taught carpentering, gardening, &c., while the smaller boys are taught household duties. In the girls' home they are taught sewing, knitting, and housekeeping duties. At the day school the ordinary curriculum of the department is carefully taught.

At Gwaye and Gwayasdums, which are respectively the summer and winter villages of the Tsawataineuk tribe, a day school is presided over by Mr. Pearson. All the above mentioned schools are under the religious control of the Church of England Missionary Society.

At Cape Mudge, under the auspices of the Methodist Missions, there is a day school under the management of Rev. J. E. Rendle.

The Indians on the whole are very apathetic in the matter of education, and seemingly do not care whether the children go to school or not. During the past year a few of the parents were fined for not sending the children to school, and it is to be hoped that this will have a salutary effect. The children as a rule are bright and intelligent and learn very readily.

Characteristics and Progress.—On the whole the Indians in this agency are inclined to be indolent and wanting in ambition according to the white man's standard. They are all very anxious to be called great chiefs, but do not care to work with their hands to accomplish this. My own opinion of the matter is that they get their food-supply so easily that the 'spur of necessity' has never been applied to them. With the exception of 'potlatching' and the use of intoxicants they are fairly law-abiding. Two murders have been committed within this agency, and for one the murderer paid the death penalty. They are nearly all more or less inclined to commit perjury when

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questioned in a court of law, and for this offence one of the culprits is now serving a term in the penitentiary, and it is to be hoped this will have a good effect on the rest. The statistics show an increased earning power during the past year, and from present indications it is hoped that a similar increase will be seen during the coming year.

Temperance and Morality.—From what I know of the Indians in this agency at the time of writing, I believe they are a fair average as compared with Indians in other parts of the province. The desire for liquor found amongst them all is here also, but apart from such drinking as is done during the fishing season at the various places, particularly at Steveston, I do not think there is any particular cause for complaint. It has just been brought to my notice that a license to sell liquor has been granted at Port Harvey, and a number of the Indians live in the near vicinity. I regret very much that such is the case, as it is generally from such places that troubles arise, as, even if the proprietor himself will not sell the liquor to them, there are always those around who will supply it to them and thus lead the Indians to do what otherwise they would have no opportunity to do. In regard to other forms of morality, I regret to say that the Indians' idea of the marriage relations are not what could be desired, and with them personal purity is not considered a *sine qua non* of a good character.

General Remarks.—Having only recently taken over this agency, I am unable to enter as fully into details as I should like. For some ten years I was a resident in this section of the country, and in other capacities, but have been away for over three years. In many ways I can note improvements during the time I was away, while in others everything seems at a standstill. I hope by the end of the coming year to be able to report progress.

I have, &c.,

W. M. HALLIDAY,

Indian Agent.

BRITISH COLUMBIA,
NORTHWEST COAST AGENCY,
METLAKATLA, July 1, 1906.

FRANK PEDLEY, Esq.,
Deputy Supt. General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my annual report respecting the affairs of this agency for the year ended June 30, 1906.

This agency is located on the northwest coast of British Columbia, extending from the head of Rivers inlet in the south to the head of Nass river in the north, including all the islands and inlets on the coast, extending up the Skeena river to Kitselas canyon, and taking within its boundaries the Queen Charlotte and Dolphin islands.

The total area of the reservations in this agency is 101,756 acres.

The population of this agency is almost 4,000.

The principal villages are Skidegate and Massett on the Queen Charlotte islands, Kitkatla on Dolphin island, Kitlaclamaux, Aiyansh, Lachkatsap, and Kineolih on the Nass river, Port Simpson and Metlakatla on the Tsimpsaan peninsula, Port Essington and New Town on the Skeena river, Hartley Bay at the entrance of Douglas channel, Kitimat at the head of Douglas channel, Kitlope at the head of Gardiner channel, China Hat on Tolmey channel, Bella Bella on Lama passage, Bella Coola at the head of North Bentic arm, Kemsquit at the head of Dean channel, Oweekano at the head of Rivers inlet. These villages can now be termed the headquarters and home of the Indian people of this extensive agency.

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SKIDEGATE BAND.

Reserves.—Located in close proximity to Skidegate inlet, Queen Charlotte islands, with a total acreage of 1,551 acres, with Skidegate village pleasantly situated near the mouth of the inlet, which is the home village of this band, are the reserves owned by them. The land in general is rough and unsuitable for agriculture. The greater number of the small reserves were old Indian villages located at the mouths of fishing streams, and are now used by these people for camping grounds when securing salmon for food purposes, and during the hunting season. In some cases small patches of the land are used for gardens.

Health and Sanitation.—The health of the Indians during the year has not on the whole been as satisfactory as last year. An epidemic of whooping-cough visited the entire agency during the summer and fall of 1905, and the Indian children of this village, in common with all others, contracted the disease, and in some cases died; in others it developed tuberculosis.

Sanitary conditions can be considered for an Indian village fairly satisfactory: in this village gradual improvement is noticed every year. I am pleased to say that this is not so much on account of strict enforcement of regulations, but these Indians are steadily improving along general lines of civilization, and this question is recognized individually by them as important to the safety of themselves and children. I regret to say that tuberculosis is on the increase this year in this village.

Occupations.—These Indians are particularly fortunate in regard to lucrative employment. The month of January among all Indians is generally spent around home, but early in February a great many go hunting marten, otter, and later black bear, the only fur-bearing animals found on the Queen Charlotte islands; and while the skins are of inferior grade to the mainland skins, and more particularly the interior furs, nevertheless they always find a ready market at lower prices. A few of the men remain at home, making Indian curios of wood and stone, and their women making fancy and useful baskets during February and March.

In the latter part of March they commence halibut fishing, which they dispose of to a halibut saltery at Skidegate or to a large fishing establishment on the Skeena river, which operates a fishing steamer this year in the vicinity of Skidegate, and purchases from the Indians all the halibut they can catch. Dog-fish operations commence in April, and many of the Indians are engaged in this business. Two oileries owned and operated by the Indians are located at Skidegate.

In June the greater number of these people migrate to the Skeena river for the salmon fishing, where they all find employment, the men fishing, the women washing fish, filling cans, &c., &c. During the past year quite a few of these Indians were engaged for some little time working on a provincial government trail, others at a copper claim some fifty miles from Skidegate; in fact abundance of employment throughout the year has been thrown in their way, and they, being fairly good workers and industrious, have taken advantage of the employment offered to improve their condition.

Buildings.—They have good comfortable homes; in many cases well furnished.

Education.—They have a day school on this reservation, which is taught by a native of this town, Peter Kelly, a graduate of the Coqualeetza institute, and the children are bright and intelligent, and when they are at home make very good progress.

Characteristics and Progress.—These people can be classed as good citizens, a little troublesome at times, a characteristic of all Indians, but not unreasonable when shown they are in the wrong; have some little trouble among themselves from time to time, but nothing serious, are inclined to be slightly jealous of one another, a feature I rather like, as it shows advancement, for in olden times the chiefs ruled, but now we find a firmness and desire of the young men in this village to take part in the affairs of the reservation.

The Skidegate Indians are industrious, self-supporting and can be termed well-to-do.

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Temperance and Morality.—Their record during the past year under this head has been very good, and when we compare their record with that of a few years ago, when they visited Victoria and other coast cities, the most skeptical believer, and there are many of them in this part of the country, cannot but admit that these people have raised themselves from a serious condition morally to a point never expected by the most sanguine missionary or departmental officer. No doubt there are cases of immorality among them; but I cannot overestimate; the credit, I believe, is largely due to the missionary for the improvement under this head.

GENERAL REMARKS.

Skidegate Indians are of the Haida nation. They are not increasing in population to any great extent. They are industrious, intelligent, and skilled artists in carving stone and wood curios. The men in general are large and of good physique and appearance, and of very good temperament. The women are among the nicest looking in the agency, and many of them, although in many cases full-blood Indians, are of light complexion, with nice hair and features. They dress nicely and in many cases modestly and with good taste. They are sought after by the cannery people, being good workers and of clean appearance, in fact, in common with all Indians in this agency, they are one of the principal factors in one of British Columbia's greatest industries, salmon canning and curing.

Rev. Mr. Hardy and Mrs. Hardy, who, by the way, has the advantage of being a trained nurse, have been located at Skidegate during the year, acting as missionaries and doctors to these people, and in them the Skidegate Indians have friends who are of the highest value to them.

MASSETT BAND.

Reserves.—The reserves of this band are all situated on Graham island, one of the Queen Charlotte group, principally around the coast line of Massett inlet, and have a total area of 1,871½ acres. The principal reserve is Massett, located in a beautiful spot just inside Massett harbour, on which the village of Massett stands, and where the home of the Haida people of the northern portion of the Queen Charlotte islands is. The land in general is of a level nature, and in many cases well adapted for agriculture.

The small reserves are mostly all located at the mouths of small streams, and are used for camping grounds during the hunting and the seasons the Indians are engaged drying and curing salmon for food purposes. A few small patches of ground on these reserves are used for gardens.

Health and Sanitation.—The health of these Indians during the year has been fair. Whooping-cough carried off quite a few of the children, and developed tuberculosis in others. Tuberculosis among these people is not decreasing, and the present year cannot be termed satisfactory; nevertheless fewer deaths are recorded than in many other smaller places. Natural sanitary conditions are favourable, but from a sanitary standpoint there is room for improvement. They have not shown the same tendency to improve in this direction as the Skidegates.

Dr. Tremayne, of Metlakatla, has been appointed medical attendant to these people, and when a steamer is furnished the agency, I expect to be in a position to render these people valuable medical attendance in important cases, and enforce more strict sanitary regulations, and thereby improve existing conditions.

Occupations.—My expectations regarding employment opening up for these people, I regret to say, have not materialized during the year. The question of remunerative employment for these Indians is one of importance, they, like all coast Indians, are largely dependent on fishing and hunting for a livelihood. During the salmon season they are engaged at the canneries on the Nass and Skeena rivers, the men fishing, the women washing fish, filling cans, &c., &c. During the early spring they engage in seal-

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hunting, and in search of sea otter, but these are both uncertain sources of income, and the past season the catch has been disappointing. They also engage in hunting black bear, marten and land otter, the only fur-bearing animals found on the Queen Charlotte islands. A noticeable falling off from year to year forecasts that this source of income cannot be much longer counted on. They do some stone and wood carving, but their work in this line, speaking generally, does not compare favourably with the Skidegates. They have some good boats and small schooners built and owned by themselves, which are most creditable, but they have little or no remunerative employment for them.

The natural resources of this part of the Queen Charlotte islands, however, cannot much longer remain undeveloped. Halibut banks lie in close proximity to Massett. The finest quality of timber surrounds its bays, sounds and inlets. Agricultural land of good quality, particularly for grazing purposes, is obtainable in fair-sized blocks. It is believed that the country is rich in coal and oil, and some prospects have been located; therefore, I have every reason to believe that in the near future needed employment right at home will be obtainable by these people.

Buildings.—They have some very good modern, comfortable dwellings; noticeable improvement is taking place regarding the interior of some of the homes, and there is ample room for it.

Stock.—They own a few cattle and horses, and undoubtedly would have more, but some years ago a number of young cattle were placed on the island, and not being herded and handled became wild, and until they are exterminated in some way there is no possibility of successfully raising cattle, as the young cattle mix up with them and soon become wild and stray from the reservation.

Education.—One day school, under the direction of Rev. W. E. Collison, and taught by Henry Edenshaw, is carried on during the year. Edenshaw is a full-blooded Haida Indian, an ex-pupil of Bishop Ridley's school conducted by him some years ago at Metlakatla, and he is an example of what can be accomplished by schools, provided they are conducted on thorough, practical principles, and the children selected, instead of being collected and accepted at boarding and industrial schools indiscriminately.

Characteristics and Progress.—These Indians are good loyal subjects, friendly and honest in their dealings with one another; in rare cases only do you find jealousy among them, which feature in Indians makes them troublesome, nevertheless has a tendency to improve their condition individually and collectively. They are making slow but sure progress along the lines of civilization.

Temperance and Morality.—They are a sober people; intoxicants are seldom found with them. They have never been accused of making wine or native brew; have had no serious trouble during the year on account of drinking. Morally they are not all they should be, but each year shows improvement, and when we consider that this particular subject is considered a very serious offence by the missionaries, the charges for such offences are more forcibly brought to my attention.

GENERAL REMARKS.

Masset Indians for the last few years show an increase in population. They have many commendable qualities. They are of good disposition, kind and generous as a rule, and in studying them carefully I find they have a certain amount of an exceedingly rare quality to be found among Indians, viz., gratitude. I have observed on more than one occasion their appreciation of kindness shown or assistance rendered them. They are gradually improving. Lack of remunerative employment is a drawback to their advancement, but I have good hopes for the future of the Massett people. It is certainly true that many of them are inclined to be indolent, or at least lack energy and stick-to-it-iveness when they have employment; but when one considers that these people are isolated the greater part of the year from civilization, and that

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a very few years ago they lived almost in a state of barbarism, one must give them credit for all they have accomplished.

There is room for improvement in these people, and they are Indians worthy of the efforts put forward to improve them. Rev. W. E. Collison, their trusted and esteemed missionary and doctor, still remains with them. Mr. Collison has an advantage over many missionaries: he was born and raised as a boy among the natives of this coast; he is esteemed and respected by all northern coast Indians, speaks the language as a native, and is devoting his life to the advancement of a people whom he has seen in all stages of life. Canadian people do not realize the debt of gratitude they owe to men who are striving to enlighten the Canadian Indian, and, as in Mr. Collison's case, isolating themselves and families from the comforts and advantages of civilization.

KINCOLITH BAND.

Reserves.—The reserves of this band are situated on the lower Nass river, Portland canal and Observatory inlet, and contain a total area of 5,135 acres. The larger reserves are unsuitable for agricultural purposes, contain small timber, but are largely mountainous and of little commercial value. The smaller reserves are principally old Indian villages, and are laid off at the mouths of small streams for fishing purposes, from which the Kincolith Indians secure their salmon for food purposes. Small gardens are generally found on them, as the land is generally good and easily worked.

Health and Sanitation.—During the year the health of these Indians has been fairly good. In common with all other coast villages, an epidemic of whooping-cough visited them during the winter, and carried in its wake a number of children. Tuberculosis is exceedingly common, and the great difficulty in this village and all others is to impress upon the family of the patient suffering from this disease that it is contagious, and no matter what you do they are exceedingly careless. In many cases living conditions will not permit them to isolate the patients, and consequently unavoidable results occur. Sanitary conditions in this village are very satisfactory, and exterior surroundings exceedingly creditable. This village is in the front rank in this important matter.

Occupations.—These people are good workers, and are very seldom without employment. During the winter months they are engaged in various vocations, logging, making oars, hunting, cutting wood, &c., &c. In the spring and summer season they are engaged almost to a man in connection with the salmon fishing, the men fishing and the women washing fish and filling cans, &c., &c. In the month of March and part of April many of them go to the oulachon fishing, and prepare the fish for food, and extract the grease, from which they derive a small income from the sales of same to interior and other Indians; but the principal portion of this commodity is used for food by themselves.

Buildings.—These Indians have good comfortable dwellings, in many cases nicely furnished. The workmanship on many of them reflects credit on these people, and is one of the strongest arguments in proof of their advancement.

Education.—One day school, under the direction of Ven. Archdeacon Collison, is carried on during the time the Indians are at home. The children are bright and fairly intelligent. A native is employed as teacher during the greater part of the year, and I have no hesitation in saying that my firm belief is, that native teachers, with few exceptions, are not a success. The Indians themselves have often told me that they have no faith in their own people as teachers, and I have invariably noticed that they lack discipline and other necessary qualities.

Characteristics and Progress.—These Indians are among the most advanced in the agency, in many ways they are making good progress. They are inclined to be somewhat troublesome at times, but taking them all in all, you can sum them up as good citizens, thoroughly loyal and self-supporting.

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Temperance and Morality.—No complaint can be made under this head, they are not perfect, but their record during the past year has been good; and while they may not always meet the views of the strict churchman, I am bound to confess that when one considers that the slightest infraction of the laws is generally brought to the attention of the authorities, and considering they are restricted from privileges the whites enjoy, and that the universal opinion is that Indians have a natural appetite for liquor, I cannot speak too highly of them and their excellent record under such circumstances.

GENERAL REMARKS.

The Kincolith Indians are of the Neishga nation. They seem to be at a standstill in so far as population is concerned, the number of births and deaths being about equal from year to year.

They can be classed as progressive, industrious Indians, have good homes and enjoy many home comforts. Many of them are good musicians, and exceedingly clever with tools. The Kincolith church is an example of their workmanship, which is commented on by all visitors to this reservation. They are inclined to be somewhat overbearing in their manner, and of a jealous disposition, but on the whole cannot be called unreasonable. They are somewhat inclined to treat the whites with a measure of distrust, more particularly is this noticeable with new settlers coming into the country, taking up land, &c., which they have looked upon as their hunting grounds, held in many cases by their ancestors for years, and the individual claims of which have been sacredly respected by one another; therefore, we can scarcely blame them for this feeling towards the strangers, which only time and the development of the country can wipe out. They are a hardy, well developed people of good appearance, dress well, live well, and are sought after by the cannery people, being good fishermen and labourers.

Among them we find the Ven. Archdeacon Collison, their greatest friend and adviser, and to him and his good lady belongs the credit for their advancement. They have spent over thirty years of their lives among these people endeavouring to lift them from a state of barbarism to the position we find them in to-day. The archdeacon, the personification of kindness and goodness, has been their missionary, teacher, director and doctor for all these years, and while I fear the Indians are not as grateful as they should be, it is because they do not yet understand, as I do, that he has isolated and deprived himself of all the advantages of civilization for their benefit. These Indians and the pioneer whites of this coast cannot estimate in figures or express in words the debt of gratitude they owe Mr. and Mrs. Collison, but their name among these people shall live till the last Indian child is born and the last pioneer is placed beneath the sod.

LACHKALTSAP BAND.

Reserves.—The reserves of this band are located on the Nass river about 15 to 20 miles from its mouth, having a total acreage of 3,955 acres. Lachkaltsap is the principal village, and is pleasantly located on the bank of the river. The small reserves are old Indian villages located at the mouths of small salmon streams. On the reserves owned by these people some very good agricultural land can be found, provided they would clear the same. The small reserves are principally used for gardens and camping grounds during the time the Indians are engaged hunting and preparing salmon for food purposes. Lachkaltsap village has been surveyed into town lots by the department.

Health and Sanitation.—The health of this band during the year has been fairly satisfactory. Whooping-cough carried off some of the younger children, and a few deaths are reported from tuberculosis. Sanitary conditions show continued improvement, and during the next year, with the assistance of Rev. J. B. McCullagh and the council, I purpose dealing more thoroughly than I have been able to do in the past with necessary improvements, which will include sanitary conditions.

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Occupations.—These Indians are somewhat removed from the coast line, but engage largely in fishing. They possibly hunt to a greater extent than the Kincolith band. They are good fishermen, and during the salmon season are all engaged fishing for the Nass river canneries, the women working inside washing fish, filling cans, &c.

They engage largely in the oulachon fishing during March and April, curing and extracting grease from this important item in the bill of fare of northern coast Indians. They are very good hunters, and some seasons obtain good catches of furs. They do some hand logging, but do not engage in this work to the same extent as the coast Indians. They have some fair-sized gardens, produce potatoes enough for their own use and a small quantity for sale.

Buildings.—They have some very good dwellings, and fairly comfortable Indian homes. Lumber is more expensive to these people than to coast Indians, as they have to freight it up stream some 20 miles; consequently their houses, while individual cases compare favourably with coast Indians, collectively are not up to the standard set by Port Simpson and other places.

Stock.—They have a few cattle, but do not engage in this industry to any extent.

Education.—There is a small day school on this reservation, taught by a native teacher under the direction of Rev. J. B. McCullagh, J.P. I must again express the opinion that very few native teachers have accomplished very much in the teaching line. The Indian people have not the same confidence in the ability and fitness of their own people for such positions as they have in whites, consequently the parents lack interest, and the school moves along in a slipshod fashion, and the results obtained are not what they should be.

Characteristics and Progress.—They can be classed as an industrious band of Indians, self-supporting, and making some progress.

Temperance and Morality.—I cannot say too much in praise of their behaviour during the past year under this head. They are sober, and only on rare occasions are charges regarding immorality brought against them.

GENERAL REMARKS.

Lachkalsap Indians are not increasing to any extent, but during the year the Kittex and Ankida people, formerly termed heathen, joined forces with them. This is very largely due to the efforts of the Rev. J. B. McCullagh, J.P., who has charge of their mission. This will not only improve their own condition, but bring closer together these bands, which for a long time have treated each other with a certain amount of jealousy and even hatred. The Lachkalsap people formerly belonged to the Methodist Church, but about a year ago they joined the Church of England, and I am pleased to learn that an amicable arrangement has been made by the two churches regarding the property. I have not the slightest hesitation in stating that in making this arrangement the churches interested have advanced the cause of religion among these people, and possibly more important to the Indians, have cemented together as it were in a moment these different tribes and factions. A common friendship and interest in their reservation has been brought about, and will not be easily severed, and this will prove of great importance in the advancement of these people.

The Lachkalsap people, I have always found, have a tendency to be narrow-minded and of a somewhat disagreeable temperament, and I cannot say that very much improvement is noticeable; however, I look for good results on account of the Ankida and Kittex people joining forces with them, and a friendly adjustment of religious matters.

Rev. J. B. McCullagh, J.P., is their pastor, doctor and teacher. Mr. McCullagh has spent the last twenty years among the Upper Nass river Indians. He is as familiar with their language and characteristics as a native; he has been, and is to-day, a power among these people; he has been their truest friend, guardian and protector, but in dealing out justice in his capacity as magistrate he has no mercy for the

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offender. Mr. McCullagh is one of the successful missionaries to whom Canadians owe more than they can repay. Depriving himself of all the comforts of civilization, with no object in view except the uplifting of heathen Indians, he has earnestly and faithfully laboured among them with marked success, and to-day has collected around him people who are loyal, self-supporting and good citizens.

KITNILLUCHSHILT BAND.

Reserves.—This small reservation is located on the Nass river, lying just below the canyon, and the people owning it reside in the village of the same name located on the river bank. The land in some places or patches is suitable for gardens, but cannot be called agricultural land.

Health and Sanitation.—The health of this small band cannot be considered satisfactory; more or less scrofula is noticeable among them, and the children do not receive the necessary care they should. Dr. McDonald, who has just located on the Nass river, will, however, be able to render them assistance, and assist me in enforcing needed changes. Sanitary conditions are not as satisfactory as I should wish but show slight improvement.

Occupations.—Fishing, hunting and working at small gardens cover the industries they engage in. During the salmon season they are all engaged at the Nass river canneries washing fish, filling cans, &c., &c. They engage in the oulachon fishing during the time these fish are running, smoking and curing them and extracting the grease for food and for sale to coast and interior Indians.

Education.—Rev. J. B. McCullagh, J.P., has had a native teacher among these people for some time past, this being the first opportunity they have had of taking advantage of a school.

Characteristics and Progress.—During the last two years these people have shown a desire to change for the better, and are making some progress.

Temperance and Morality.—These Indians during the year have certainly behaved themselves most creditably. They have largely discontinued the manufacture of brew, and morally they are improving.

GENERAL REMARKS.

This small band of Indians is not increasing in population. They have always strongly held out against the missionary and the church, but during the past year some of them have joined the Church of England, and the thin edge of the wedge cleaving them from old habits and customs has gained an entrance and marks a step in their advancement.

They cannot be called indolent, as they are good hunters and fishermen; but heretofore they have been inclined to be careless about themselves and their appearance, but I think they have the qualities to improve.

AIYANSH BAND.

Reserves.—This band is located on the lower portion of the Kitlaedamax reserve, which has a total area of almost 4,000 acres. Here we have one of the finest reserves in this agency from an agricultural standpoint, the land being level and easily cleared and the soil possessing all the qualities for mixed farming. They also have several small fishing stations, which they use when securing food.

Health and Sanitation.—The health of this band during the year has been exceptionally good, there having been no serious illness of any kind among them. The sanitary arrangements are good, and are strictly enforced under the direction of the council and Rev. J. B. McCullagh.

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Buildings.—These Indians have good comfortable dwellings, in many cases well furnished and nicely kept. The surroundings are clean, and present a thrifty appearance.

Education.—On this reservation one day school is kept open the greater portion of the year.

Characteristics and Progress.—These Indians are among the most enterprising and advanced in the agency.

Temperance and Morality.—These Indians have a good record for the year; however, there is no use in disputing the fact that, if they had a chance, some of them would not refuse intoxicants. Morally their record is excellent.

GENERAL REMARKS.

The Aiyansh Indians show a gradual increase from year to year. This is caused by migration from heathen villages, and also a natural increase. These people are worthy of special mention for their advancement and progress. When it is considered that they live some 60 miles from the coast line, and are obliged to freight their provisions and a portion of their building material in canoes against a strong current, it can be easily seen that difficulties present themselves; nevertheless their homes, their dress and appearance compare favourably with the best. They are good workers, have a small saw-mill and are advancing in every way. They are reasonable in their demands and dealings, and self-supporting.

Rev. J. B. McCullagh, who has been their greatest benefactor and teacher, still oversees their missionary work among them.

KITLAEDAMAX BAND.

Reserves.—The reserves of this band are all situated at the head of the Nass river, the principal reserve on which the village of Kitlaedamax stands being the upper portion of the Kitlaedamax reserve. The land is of excellent quality and well adapted for mixed farming. The small reserves are located at the mouths of small streams and are used for camping grounds during the time these people are curing salmon for food purposes.

Health and Sanitation.—The health of these Indians during the year has been very good. Sanitary conditions are improving. This is one of the reserves I expect during the ensuing year to see marked improvement in, under this head.

Occupations.—Fishing, during the seasons, is the only occupation followed by these people, and hunting interior fur-bearing animals during the winter season.

Buildings.—The buildings are all of the old style Indian houses, but warm, comfortable and healthy.

Stock.—They own a few cattle and horses.

Education.—They have no school, but lately have shown a desire to have one. A few of the children have attended the day school at Aiyansh during the year.

Characteristics and Progress.—These people have shown considerable advancement during the last two years. They are industrious and self-supporting.

Temperance and Morality.—These Indians have shown marked improvement during the last two years in so far as temperance is concerned. They make wine from berries and are exceedingly fond of it, but gave less trouble during the past year than ever before.

GENERAL REMARKS.

The Kitlaedamax Indians are of the Neishga nation, speaking the Neishga language. They are decreasing in population. During the past year quite a few of them have removed to Aiyansh. These Indians are very industrious and have always

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been disposed to reject the invasion of the missionary among them; but of late a change has come over them in this respect, and a number of them accepted the Church of England faith and became members of that body. They are self-supporting, fairly industrious and are improving. This state of affairs is very largely due to Rev. J. B. McCullagh, who has laboured at Aiyansh among their Neishga brothers and sisters, and has always shown the same friendship towards them as to his own people; transacting their business, visiting the sick and rendering them any assistance required, but not attempting to force on them religion, which they always rejected as a body. These Indians have many good qualities and are worthy of efforts being put forth for their further advancement. My opinion is that they will largely become members of the Aiyansh band, who have always extended open arms to them, and in time will become one village and one reserve.

PORT SIMPSON BAND.

Reserves.—The principal reserve in this agency from the standpoint of size is the Tsimpséan reserve, with a total acreage of 57,742 acres, the northern half belonging to the Port Simpson people, and the southern portion to the Metlakatlas. Besides this large reserve they have many fishing streams laid off and surveyed for them on the Skeena river and other points. The land in general is unfit for cultivation but portions of it are suitable for raising vegetables, and in such places they have small gardens.

Port Simpson, the home of these people, is one of the oldest places on this coast. Here the Hudson's Bay Company started many years ago a trading post, which it still carries on at this point. The Indian village covers Village island, and a portion of the shore line bordering on Cunningham passage of the Tsimpséan peninsula.

Health and Sanitation.—The health of the Port Simpson people during the year has been good, except that an epidemic of whooping-cough, which swept this agency, carried off a number of children. Dr. Kergin reports a slight increase in tubercular patients during the year, but heretofore these people occupied an enviable record owing to their freedom from this disease. Sanitary conditions are good, and compare favourably with those of white villages of the same size.

Occupations.—These Indians are good workers. During the early winter months they remain at home putting their houses in order, building and repairing their boats and nets, and doing other work of this nature. In March and April they scatter over the country; some of them can be found at the Nass river engaged in curing the oulachon, and extracting the grease for food; others hunting the bear, mink and marten, some of them logging and working in the mills. The months of June, July and August find them engaged at the Skeena river salmon fisheries; they are good fishermen and are always in great demand for this work, the women filling cans, repairing nets and doing other interior cannery work. The months of September, October, November and December in the past have not afforded the people on this coast an opportunity to earn very much, as, after the fishing is over, very little remunerative employment is to be found. However, this condition of affairs will more than likely be wiped out from this time forward, as the country opening up should furnish more employment to these people the year round.

Buildings.—These people have many fine dwellings and homes. The design and work on many of them show good judgment and workmanship.

Education.—The Crosby Girls' Home, located on ground in close proximity to the reserve, is one of the up-to-date institutions of this agency, some 45 girls from many points of this agency are domiciled here, receiving an education and training second to none. Miss Paul, the principal, and her staff of lady assistants are doing excellent work in preparing the young Indian girls under their charge to improve their condition, and, if possible, advance them along the lines of civilization. The boys' boarding school, under the direction of Mr. J. A. Butchart, B.A., has done good work

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during the year for a school of this class. The day school at this point, in common with other places, has the great drawback of the people being away from home a great portion of the time, but improvement in attendance is noticeable during the past year, and with a new school, well furnished, and an experienced teacher, such as Mrs. Butchart, in charge, it can be safely said that the education of Port Simpson children is receiving ample and satisfactory attention.

Characteristics and Progress.—These people are progressive, taken as a whole exceedingly industrious and advanced.

Temperance and Morality.—They may be classed as a temperate people, very little trouble arising through drunkenness during the year. Morally their record is very good; in common with all other people, individual cases of immorality are heard of.

GENERAL REMARKS.

Port Simpson, during the last few years, is known to every Canadian school boy, as this beautiful spot on the Pacific with its magnificent harbour, has been looked upon as the only possible terminus of one of Canada's great national highways. Here we have the largest Indian town and population on the Pacific coast, over 700 natives making their home at this point. The Simpson Indians are not increasing, taking one year's statistics with another, but are holding their own.

They have modern, well built, and in many cases well furnished homes. Strangers visiting this point remark to me that they are greatly surprised at the general advancement of these people. They are of splendid physique and general appearance, dress and live well, and, as before stated, are industrious and progressive. They have many good qualities and a fairly good disposition. They guard jealously the lands allotted to them, and the more enlightened are not altogether satisfied with the existing conditions governing their lands, as they find now the white settler, who comes in and pre-empt's Crown lands, has advantages they do not enjoy, regarding the sale of the same, &c., &c.

They are good mechanics, more especially in so far as wood-working is concerned, and they have more stability than most Indians in this agency. They are good musicians and have the finest Indian brass band in this province, taking first prize at the Dominion exhibition last year. The younger men should have the advantages of a thorough, practical manual training, more particularly in carpentry, boat and ship-building. The Rev. John Grenfell, of Ottawa, has been their pastor during the last two years. Mr. Grenfell's removal from this coast is a loss to these people. Although Indian work was new to him, it surprised those who came in contact with him how quickly he grasped the right methods of gaining their confidence and good will, and he enjoyed their respect and esteem almost from the first, and therefore did splendid work among them.

The Port Simpson General Hospital, under the direction of Dr. Wm. T. Kergin and a splendid staff of trained nurses, is doing the greatest work, not only among these Indians, but among all northern coast Indians, that can be done for them. Medical relief and treatment to the suffering is an angel of mercy to the Indian, to a greater extent, if such is possible, than the whites, for the Indians in many cases lack the means of comfort and assistance that the whites can command.

Adjutant Blackburn of the Salvation Army, carries on a branch of this religious body among these Indian people, and enjoys their respect and confidence.

METLAKATLA BAND.

Reserves.—The southern half of the Tsimpsean reserve—Digby, Tugwell and a part of Kaien island—covers the principal part of the reserves of these people, with a total area of something over 25,000 acres. A great portion of the land might be called worthless, but on Digby island and the land bordering the north side of Venn passage,

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some excellent soil is found. On this portion of the reserve the historic village of Metlakatla is situated, pleasantly located on the shore line of Metlakatla harbour.

Health and Sanitation.—The health of these Indians during the year has been only fair, whooping-cough on its visit to the coast did not neglect to pay this reserve a call. Tuberculosis has increased in this village during the past year, possibly brought about by the condition some of the children were left in from whooping-cough. Sanitary conditions are satisfactory.

Occupations.—Fishing during the salmon season and general work around the canneries is the principal source of income up to the present time on which these people depend for a living. The Grand Trunk Pacific railroad commencing work on Kaien island should give them constant employment, provided they wish to engage in the class of work that will be opened up for them during construction.

Education.—The Metlakatla industrial school, under the management of Mr. John R. Scott, has had a full complement of pupils during the year. Great difficulty has been experienced in obtaining a competent and satisfactory trades instructor for the boys' branch of this institution. The girls' branch is under the management of Miss Forbes, with two lady assistants, and as they are all eastern ladies, and the training of Indian pupils a new problem for them to solve, they have had some trying experiences. As they are all from eastern Canadian ladies' colleges and the pupils domiciled here are Indian girls from different parts of the agency, no doubt it is a new and trying experience for them, but they are working hard to master the situation. Miss Jackson, one of the most competent and successful teachers in the agency, assisted by Miss Legaie, a native teacher, conducts the Indian day school, where the girls of the industrial school are also taught by Miss Jackson. The children under Miss Jackson's tuition have made marked progress during the year. A new school-building, much needed, has been applied for to the department.

Temperance and Morality.—Their record in this respect is second to none in the agency.

GENERAL REMARKS.

Metlakatla has always occupied a prominent place in so far as Indians are concerned. Here Mr. Duncan, the noted missionary, settled about fifty years ago, and won the loyalty and confidence of a people living in ignorance, barbarism and heathenism, to such an extent that even the most successful and experienced missionaries cannot understand. Here it was that the Church of England and Mr. Duncan disagreed over the management of religious matters among the Indian people, and as a result about 800 Indians, loyal and devoted to their great leader, followed him to a foreign country.

During these fifty years a great many changes have taken place, but the Indians who remained, while they speak in the highest terms of Mr. Duncan, and keenly felt the hardship of severing from their families at the time, have proved to be true, loyal Canadians, and to-day feel satisfied that they will be repaid for their devotion to the land of their birth, and many of them will live to see, I believe, a great many of their not only American cousins but their legal cousins return from the country of their adoption to the land of their birth.

My reason for these remarks is based on the fact that Metlakatla to-day is used as the headquarters of the Grand Trunk Pacific railway while their engineers are engaged in laying off a townsite, and making a survey of a harbour for the Pacific coast terminus of this company within two miles of the old historic spot, and that this terminus must consist more or less of Indian lands belonging to these people. The opening up of this reserve enhances the value of all of it, and brings employment and business to the very door of these people, and the Indians under Mr. Duncan are alive to this, and will seek a home where employment can be obtained.

The Metlakatla people as a whole lack the energy and push of some of the other bands in this agency, but they have many excellent qualities, are of a good disposition,

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truthful and honest. I may add that I was keenly disappointed quite recently when a few of them engaged with the engineers gave up work, with hardly a moment's notice, stating that they were not satisfied with the wages paid; but my belief is that the reason they gave up the work was on account of the new experience of having a master over them from 7 a.m. till 6 p.m. However, they will gradually fall into line, and when they do so will prove good faithful labourers.

Bishop Du Vernet has resided here during the absence of their pastor, Rev. J. H. Keen, who is in England on a holiday. Mr. Keen is one of the able men in this agency, and has devoted a number of years to the advancement and welfare of the Indian people, mastering two Indian languages, a task accomplished by very few. Mr. Keen has broad and sound ideas regarding the throwing down of imaginary reserve lines surrounding Indians, and other advanced ideas, not always found among missionaries, concerning their future advancement.

KITKATLA BAND.

Reserves.—The principal reserve of these people is situated on Dolphin island, and with eighteen small fishing reserves makes a total area of 4,040 acres. The land comprising these reserves is suitable only for hunting and for camping grounds during fishing operations.

Health and Sanitation.—The health of these people during the year has been very good. In common with all other Indian people, tuberculosis appears to be the cause of the greater number of deaths. This is a very old village, and sanitary conditions are not as good as they should be, but improvement is noticeable.

Occupations.—The Kitkatla Indians are good 'rustlers,' and make a good living. They engage in salmon fishing on the Skeena and Lowe inlet. Their principal income outside of this is derived from hunting fur seal and other fur-bearing animals. They also engage in hand logging.

Education.—A day school, taught by Miss Flower under the direction of Rev. R. H. Gurd, is kept open during the year. They are badly in need of a new school-building at this point, and application will be made for one during the year.

Temperance and Morality.—These people give very little trouble through intemperance. Morally they are fully up to the average.

GENERAL REMARKS.

These Indians are a branch of the Tsimpsean nation, speak the Tsimpsean language, but a different dialect. They are exceedingly industrious, excellent workers and providers.

They are not increasing in population. Taking one year with another, they about even up.

In many ways they are a hard people to understand, inclined to be of a sulky, unpleasant nature, exceedingly haughty, and intermingle very little with other tribes. They are very superstitious, and believe in witchcraft to a greater extent than any other tribe in the agency. They never mix with whites to any extent, and they are not friendly towards them as many tribes are.

Rev. R. H. Gurd is their pastor, doctor and teacher; he having mastered their language and won their esteem and confidence, they rely on him largely for counsel and advice. Mr. Gurd and his good lady have laboured for a great many years among the Indians of this agency, and are highly esteemed and respected not only by the natives, but by the early pioneers and settlers of this coast.

PORT ESSINGTON, KITSUMKELUM AND KITSELAS BANDS.

Reserves.—The reserves of these Indians are all situated on the Skeena river. The Port Essington special reserve adjoins the town of Port Essington, and is increas-

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ing in value. The Kitsumkelum reserve and the Kitselas reserve, situated some 70 or 80 miles up the Skeena river, contain some good agricultural land. All these reserves will increase in value as the country opens up. In the centre of the Kitselas reserve is a ten-acre Crown grant, which has recently been townsite and placed on the market. This will tend to increase the value of the adjoining reservation.

Health and Sanitation.—Tuberculosis is very common among the Port Essington Indians; their houses being old and in many cases only shacks, the care is not always taken with patients that should be; and as this reserve for many years was in dispute as to ownership, the Indians living there did not apparently follow the trend of advancement other tribes did. Sanitary conditions are improving, a tendency to improve their reserve is very noticeable this year, and some necessary improvements have taken place.

Occupations.—These Indians depend on fishing, hunting, working at the canneries, saw-mills, &c., for a livelihood.

Buildings.—The houses on the Port Essington reserve as a whole are exceedingly poor and dilapidated, some improvement, however, is noticeable this year, some very nice comfortable dwellings are found at New Town, Kitselas reserve.

GENERAL REMARKS.

These Indians are all of the Tsimpsen nation and speak the Tsimpsen language. Those of them that reside at Port Essington are brought in daily contact with the white man and his influence. They have opportunities to obtain intoxicants the year round that no other Indians in the agency have. They obtain it at times, but are exceedingly cautious for Indians how they use it, certainly there are exceptions to this rule and they overstep the mark and are found out and punished. The Port Essington Indians as a rule are a difficult people to describe, they have many good qualities, they are friendly towards the whites, and many of them are industrious and good workers, but they lack the desire or pride of many other Tsimpsens in so far as their homes are concerned, the interior and exterior of which show an exceedingly careless condition. At this point the Rev. B. C. Freeman, formerly of Skidegate, is located, and is doing his best to advance their interests. Adjutant Gosnell, of the Salvation Army, resides just outside this reservation, and a number of the people follow this form of worship.

Miss Tranter, the teacher of the Indian day school, has been with these people a number of years. She is without a peer in the teaching of Indian children in this agency. She has mastered the language in every detail and her pupils show what can be done with a day school, provided the teachers are qualified and regular attendance can be secured.

Dr. T. A. Wilson, of Port Essington, is their physician and medical attendant, and takes a deep interest in all cases of sickness among the Indian people, giving them faithful attention and service.

HARTLEY BAY AND CHINA HAT BANDS.

Reserves.—The reserves of these people are situated on the coast line, and in general are of a rugged nature and not adapted for agricultural purposes. They are useful principally as hunting grounds.

Health and Sanitation.—The health of these two small bands during the year has been fully up to the average. Sanitary conditions are fairly satisfactory.

Buildings.—Hartley Bay people have some very nice new homes, quite modern and well built. The China Hat people are not so far advanced in this respect, but have some very good dwellings.

Occupations.—The Indians living on these reserves are constantly engaged fishing at Rivers Inlet and the Lowe Inlet canneries during the fishing season. They do considerable hand-logging in the winter season and are good hunters. From these various pursuits they make a good living.

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Education.—At Hartley Bay, Rev. Geo. Read, their pastor, doctor and teacher, carries on a day school. Mr. Read is what might be called a very successful practical worker among the Indians, and he is a man highly respected by Indians and whites alike.

At China Hat the school is carried on by Miss Edgar, under the direction of Rev. George Edgar, a native clergyman. Mr. Edgar is an example of what civilization and a practical training will do among the Indians, provided the children are selected, and those worthy of a training given one. Mr. Edgar enjoys the confidence and respect of his own people to a greater degree than most native teachers do.

Temperance and Morality.—These people have a very good record, more especially does this apply to the Hartley Bay people, and while there are individual cases among the China Hat people that are not so deserving of praise, collectively they are temperate people.

KITLOPE BAND.

Reserves.—The reserves of this small band are situated on Gardner channel, Coast district, and are suitable only for hunting purposes.

Health and Sanitation.—The health of these people has been fair, but an exceedingly small birth-rate from year to year gradually reduces the population. Sanitary conditions are not satisfactory, but as the reserve is large and buildings scattered, no great danger arises. These people are so far removed from the regular coast line, and are so hard to reach, that conditions are not improving. With a steamboat at my disposal, I hope to visit them at least twice a year, and, if possible, improve their condition.

Buildings.—The few buildings they have are fairly comfortable, but uninviting in appearance.

Education.—They have no school, but a few girls attend the Kitimat boarding school.

Temperance and Morality.—With no clergyman to hold them in check, they are inclined to drink, and have even made a substitute with a crude still.

KITIMAT BAND.

Reserves.—The reserves of these people are all situated on Douglas channel, and are not adapted for agricultural purposes. They have a very nice village on the Kitimat reserve along the east side of the head of Douglas channel.

Health and Sanitation.—The health of these people during the year cannot be termed over fair. Tuberculosis is deeply rooted among them, and a good many deaths have occurred. Sanitary conditions have improved somewhat during the last two years.

Occupations.—Fishing during the salmon season, mostly at Rivers inlet, hunting in season, working at the canneries and logging form the principal occupations of these people.

Buildings.—They have some very good houses, which from the outside look very well, but the Kitimat Indian woman is not an ideal housekeeper, and there is great room for improvement in the homes of Kitimat people.

Education.—On this reserve is located the Kitimat Girls' Home, owned and supported by the Women's Missionary Society of Toronto. Miss Long and Miss Jackson, the ladies in charge, are doing excellent work among the Kitimat girls, giving them a good practical training in housework, cleanliness and general domestic knowledge. It is with regret I am obliged to state that this home was destroyed by fire a short time ago, but it will be immediately rebuilt. On this reserve is also the Kitimat Indian day school, taught during the past year by Miss Bower, M.D.

Temperance and Morality.—They give very little trouble through intemperance. Their record in this respect is good.

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GENERAL REMARKS.

The Kitimat people form one of the important bands making up this agency. Their mother tongue is exceedingly hard to master, and with the exception of Rev. Geo. Raley and Mr. Robertson, of Kitimat, I know of no one having done so. They may be called a peculiar people; they take life pretty easy as a rule, but are comfortable. They are inclined to be of a troublesome nature, but have some good qualities; cannot be called indolent nor yet industrious. They show a good deal of respect to their chiefs as a rule. Their children are bright and fairly intelligent. They are well worthy of the efforts being put forth for their advancement.

Among these people we find Rev. George Raley, who has been their minister, doctor and teacher for a number of years. Mr. Raley will shortly remove to Port Simpson, and his removal from Kitimat creates a vacancy that is not easily filled. The Department of Indian Affairs, and Canadians in general, are indebted to Mr. Raley for civilizing and advancing step by step a large band of Indians, and while he has been so engaged he was obliged to isolate himself and family from all the comforts and advantages of civilization. Miss Dorothy Bower, M.D., is rendering excellent service among these people from a medical standpoint, and for the past year has carried on the day school in addition to her other work.

BELLA BELLA BAND.

Reserves.—The reserves of this important band are situated in the Coast district, and comprise a total area of 3,372 acres. The flourishing village of Bella Bella stands on the Bella Bella reserve, and is the home of one of the largest and most important Indian peoples in the agency.

Health and Sanitation.—The health of these Indians during the year has been fair, with the exception of an epidemic of whooping-cough; nevertheless the death-rate has been exceedingly high, tuberculosis being the principal disease, which causes this having to be stated.

Occupations.—Fishing during the salmon season at the Rivers Inlet canneries is one of the principal occupations of these people. Hunting fur seal on Goose islands during the months of April and May, logging and building boats, form the sources of labour from which these people derive a very comfortable living.

Buildings.—On this reserve are many good comfortable homes. Improvements such as painting, finishing the interior and general improvements have been taking place during the year.

Education.—On this reserve is a day school, Miss Beatty being the teacher. These people do not show much interest in the education of their children, and are exceedingly careless about sending them to school even when they are at home.

Temperance and Morality.—They compare very favourably with other Indians in so far as temperate habits are concerned. I have had some trouble with a few of the women of this reserve during the year. Morally they are not worthy of any extra bouquets being handed them through this report.

GENERAL REMARKS.

The Bella Bella Indians are not increasing. They are industrious, contented, self-supporting people. They are worthy of special mention for their efforts in building up their new village, having lots of pluck and perseverance when one compares them with other Indians. They own their wharf and have a steam saw-mill on the reservation. The Bella Bella people are progressing along the lines of civilization. They have many good qualities, and there are individual cases among them of men that are worthy of special mention for their many sterling qualities.

Dr. R. W. Large is their pastor, doctor, and I may safely say, guardian. He has laboured among them with marked success. Pleasantly located in this village is a

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well equipped hospital and a staff of trained nurses. The Indians are greatly interested in this institution, and feel a pride in it, and they have good reason to do so, for at the hands of Dr. Large not only Indian patients, but white patients from all over the coast, receive skilful surgical and medical treatment and nursing. Bella Bella hospital is one of the institutions all coast people feel an interest in and are proud of.

KEMSQUIT, TALOMEY AND BELLA COOLA BANDS.

Reserves.—The Kemsquit reserves are located at the head of Dean channel, and contain a total area of 930 acres. The Talomey and Bello Coola reserves are located on the southern and northern arms respectively of Bentic arm, and contain a total area of 4,007 acres. The Kemsquit reserves contain some agricultural land and fair-sized timber, but the soil is not well adapted for farming, being of a gravelly nature. Much good soil is distributed through the Talomey reserves and some excellent timber. The Bella Coola reserve is, beyond doubt, the most valuable reserve according to the acreage in this agency. The finest soil and excellent timber, with good tidal flats producing excellent grass, describes as nearly as possible the natural features of this reserve. The Bella Coola reserve has been partly surveyed into small farms.

Health and Sanitation.—The health of these people during the year has been fair. They did not escape the epidemic of whooping-cough which swept the coast during the year, and in its wake a number of children were carried off. Sanitary conditions are not satisfactory, but when I shall have my own boat I expect to spend more time with such people as these and try to improve their condition.

Buildings.—The Kemsquit people are improving their homes. I am very pleased to be able to state that during the last two years they have shown a decided tendency to improve in this respect.

Stock.—They have a few cattle and horses.

Education.—An Indian day school is kept open the greater part of the year at Bella Coola. These people take little or no interest in the education of their children, and it is with difficulty the teacher can secure enough children to carry on the school.

Temperance and Morality.—These Indians are fond of liquor, and make a wine from dried fruits, rice, sugar and other ingredients, which intoxicates them. I have experienced great difficulty in securing reliable evidence to convict, but recently planned and made a successful raid, and severely punished the offenders. Morally their record is not good and improvement not encouraging.

GENERAL REMARKS.

These people have some qualities not always found among Indians. They are friendly towards whites, and are of a good disposition. They are decreasing in population, the birth-rate being exceedingly low among them. They are fairly good workers, and make an independent living from fishing, hunting, logging, &c. These Indians would improve if they were not so fond of feasting and making and drinking wine, but it is a difficult problem to solve. Taking their money for fines, punishing by imprisonment, and depriving their families of the father's support, has its drawbacks, but it appears the only treatment for these people, even if it works a hardship in individual cases.

Dr. J. C. Spencer is their pastor and doctor, but they take little or no interest in religion. I cannot see the slightest improvement among them, notwithstanding the doctor has worked hard among them to improve their condition and lift them to a higher level. They cannot be induced or led to take an interest in the church like many other Indians; they simply do not take any stock in such matters, and are contented as they are. Time may improve them in this respect, but the 'mills of the gods grind slow' among these people.

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OWEEKANO BAND.

Reserves.—The reserves of this band are located at the head of Rivers Inlet, and contain a total acreage of 1,761 acres. The land, with the exception of a few patches, may be classed as worthless, except for hunting and fishing purposes.

Health and Sanitation.—The health of this band during the year has not been satisfactory. A number of tubercular cases have been reported. Sanitary conditions show slight improvement.

Occupations.—Fishing, hunting and logging are the chief occupations of these Indians.

Buildings.—No new buildings have been erected during the year.

Education.—A day school was kept open by the Methodist Church during the year.

Temperance and Morality.—When they can obtain whisky they never refuse it, and they also try to manufacture it. Morally they show some improvement this year.

GENERAL REMARKS.

These people are decreasing, the birth-rate is low. I am pleased to note a change in them during the last two years. This is entirely due to the efforts of Mr. and Mrs. Bromwich, their missionaries, who have gradually won their confidence. They are fond of intoxicants and feasting, but improvement is noticeable among them this year.

They are of an indolent nature and take life easy, but always have employment, logging, fishing and hunting, and, consequently are self-supporting and independent. The great drawback to these people is their physical condition, they are badly tainted with venereal diseases. During the summer months they receive treatment from Dr. Large at the hospital at Rivers Inlet.

The year just ended may be called an average one in so far as the Indians of this agency are concerned. Taking the combined earnings, from fishing, hunting, logging and from other employment, they make a fair average year's total.

The birth-rate of Indians this year is about an average one; but the death-rate, especially among the children, has been heavy; this is due to an epidemic of whooping-cough which carried off a great many of the delicate youngsters, and developed tubercular conditions in others.

The Indians of this agency have not met with any disasters, such as fire, during the year.

No epidemics or contagious diseases, except whooping-cough, visited the agency during the year.

The medical men engaged by the department have rendered valuable assistance to the Indians, and I am more convinced than ever that this is the form of relief that Indians require, and should be absolutely free to them. I believe that money expended in this way is possibly more valuable to the Indian than expensive schools. The Port Simpson General Hospital, under the direction of Dr. Kergin and a staff of trained nurses, has rendered valuable assistance to Indians from all points in the northern part of this agency.

While on this subject, I am forced to remind the department that the disease most common to our Indian people, and in my opinion the only incurable one among them, and the chief source of their decrease, is tuberculosis, and that the only means of arresting the progress of this disease among them is by isolation of the patients, not that I have the slightest belief that an Indian patient suffering from this disease can be cured, but because I believe this is the only hope of protecting and saving Indian families, in the homes where unfortunate patients are suffering, from complete extinction.

Dr. Kergin, Dr. Wilson, Dr. Spencer, Miss D. Bower, M.D., Dr. Large, Dr. Tremayne and the numerous clergymen in the agency have fought diseases among these people with all the energy and skill they possess, but one and all are forced to

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admit that their efforts, in so far as tuberculosis is concerned among Indians, are practically hopeless. Therefore, I say that only by isolation of the suffering can the object aimed at be attained, and, if such is possible, the suffering patient cured.

My opinion is that our school system, as carried on among Indians, is doing a good work, but that the time has arrived when changes, heretofore impracticable, should be made. I have no hesitation in stating that the time has arrived when day school teachers should qualify for these positions, and that the inspector of schools should recommend changes, and have them carried out. I am satisfied that a teacher among Indians that the people are tired of, or dislike, could do good work in another school, but might continue for ever in the old without success.

The boarding school system is apparently a good one, and certainly the best from a monetary standpoint in so far as the department is concerned, but these schools are all largely supplemented by the missionary societies.

The industrial schools are not accomplishing the work expected of them, and never will until the children are graded into them from the day and boarding schools. If this system were in force, I believe day schools would do better work, and Indian boys and girls would have something to look forward to, but indiscriminately placing children in industrial schools, so long as they are of age and pass a kind of medical examination, will never give the results expected, or return for the money invested. This system up to the present time I will grant may have been necessary, but the time has arrived, in my humble opinion, for radical changes in the Indian school system, and in this I believe I shall be supported by the leading missionaries and educationists connected with Indian work. I would make the industrial school what it should be: I would place it in the same relation to Indians as the high school is to whites, and when I had children, who at least understood English, domiciled there, I would make it compulsory for these institutions to teach them trades that they are most suited for, and that are most suitable to the locality the children are from. This argument will be met by the statement that we have not sufficient funds placed at our disposal to engage trades instructors. I contend, if this is the case, that it would be better to add a small amount to the grant, and accomplish as far as is practicable with Indians what the object of the department is in making the grant.

Rev. R. Whittington, M.A., D.D., Superintendent of Methodist Indian Missions, has paid the agency in connection with his work several visits during the year. Dr. Whittington is one of the men that it gives pleasure to meet. His general knowledge gained from extensive missionary work serves him in dealing with Indian questions. I cannot speak too highly of him for his fairness in dealing with church questions or troubles arising that concern the agent.

His Lordship Bishop Du Vernet, who resides at Metlakatla, and supervises the Indian work in his diocese, takes a deep interest in everything pertaining to the welfare and advancement of the Indian. Bishop Du Vernet's demands are always fair and reasonable, and on more than one occasion he has rendered me valuable assistance in settling Indian matters in which he was interested.

With such men as Bishop Du Vernet and Dr. Whittington supervising the missionary work among the people, the agent is encouraged in filling a position that has many unpleasant sides and exacting demands and conditions.

Meeting the duties of an Indian agency this size is no sinecure, and while many people are devoting their lives for the betterment and advancement of the Indian, I must openly state that the need of the salary paid has proved a large factor in forcing me to withhold my resignation on more than one occasion.

I have, &c.,

GEO. W. MORROW,

Indian Agent.

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BRITISH COLUMBIA,
WEST COAST AGENCY,
ALBERNI, June 30, 1906.

FRANK PEDLEY, Esq.,
Deputy Supt. General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my annual report on the affairs of this agency for the year ended June 30, 1906.

Location of Agency.—This agency extends from Otter Point to Cape Cook, a distance of 200 miles along the west coast of Vancouver island.

Reserves.—The eighteen tribes forming this agency have 150 reserves and fishing stations, aggregating 12,390 acres, or about 5 acres per head of population. There are two large reserves in Barclay sound, one at Alberni, belonging to the Tseshaht band, containing 1,030 acres, and the other at Numukamis, Sarita valley, belonging to the Ohiat tribe, and containing 1,700 acres. The acreage of the other reserves varies from 2 acres to 250 acres each. The majority of these reserves are rocky, timbered or tidal lands, given for village sites and fishing stations, with only small patches of land suitable for cultivation.

TSESHAHT BAND.

Reserves.—The principal reserve of this band, and where the Indians have their most permanent home, is named Tsahahch (No. 1), and is situated on the west bank of the Somas river at Alberni, and comprises an area of 1,030 acres. The total area of all their reserves is 1,458 acres.

OPITCHESAHT BAND.

Reserves.—The principal reserve of this band, and where the Indians make their most permanent home, is named Ahahswinnis (No. 1), and is situated on the east bank of the Somas river at Alberni, and comprises 96 acres. The total area of all their reserves is 422 acres.

HOWCHUKLISAHT BAND.

Reserves.—The principal reserve of this band, and where the Indians reside, is named Elhlateese (No. 3), and is situated at the head of Howchuklisaht harbour, Alberni canal, and comprises an area of 400 acres. The total area of all their reserves is 575 acres.

OHIAT BAND.

Reserves.—The principal reserves of this band, and where the Indians mainly reside, are named Ahadzooas (No. 7) and Haines Island (No. 8), and are situated at the eastern entrance of Barclay sound, and they comprise an area of 145 acres. The total area of all their reserves is 2,671 acres.

TOQUAT BAND.

Reserves.—The principal reserve of this band, and where the Indians make their chief home, is named Mahcoah (No. 1), and is situated at Village passage, Barclay sound, and comprises 124 acres. The total area of all their reserves is 421 acres.

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EWLIHULHAHT BAND.

Reserves.—The principal reserve of this band, and where the Indians reside, is named Ittatso (No. 1), is situated on Ucluellet arm, Barclay sound, and comprises an area of 180 acres. The total area of their reserves is 649 acres.

CLAYOQUOT BAND.

Reserves.—The principal reserve of this band, and where their permanent home is, is named Opitsat (No. 1), is situated on Clayoquot sound, and comprises an area of 180 acres. The total area of all their reserves is 540 acres.

KELSEMAHT BAND.

Reserves.—The principal reserve of this band, and their permanent home, is named Yahkis (No. 11), is situated on Flores island, Clayoquot sound, and comprises 180 acres. The total area of all their reserves is 223 acres.

AHOUSSAHT BAND.

Reserves.—The principal reserve of this band, and their permanent home, is named Mahktosis (No. 15), is situated on Matilda creek, Clayoquot sound, and comprises 250 acres. The total area of all their reserves is 826 acres.

HESHQUIAT BAND.

Reserves.—The principal reserve of this band, and where the Indians reside, is named Heshque (No. 1), is situated at Heshquiat harbour, about 20 miles north of Clayoquot sound, and comprises an area of 222 acres. The total area of all their reserves is 577 acres.

MOACHAHT BAND.

Reserves.—The principal reserve of this band, and where the Indians mostly reside, is named Yuquot (No. 1), is situated at Friendly cove, Nootka sound, and comprises 210 acres. The total area of all their reserves is 527 acres.

MATCHILAHT BAND.

Reserves.—The principal reserve of this band, and where the Indians generally reside, is named Cheshish (No. 15), is situated in the rear of Bligh island, Nootka sound, and comprises an area of 29 acres. A number of these Indians live much of the time with the Moachaht band, with whom they are much intermarried. The total area of all their reserves is 127 acres.

NOOCHATLAHT BAND.

Reserves.—The principal reserve of this band, and where the Indians reside, is named Noochatl (No. 1), is situated on Esperanza inlet, and comprises an area of 16 acres. The total area of all their reserves is 188 acres.

EHATTISAHT BAND.

Reserves.—The principal reserve of this band, and their home, is named Oke (No. 10), is situated on Esperanza inlet, and comprises 32 acres. The total area of all their reserves is 123 acres.

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KYUQUOT BAND.

Reserves.—The principal reserves of this band, and where the Indians make their permanent home, are named Aktese (No. 1), Village island, and Kukamukamees (No. 2), Mission island, comprising an area of 193 acres. These islands form part of the Barrier island group. The total reserves of this band comprise 611 acres.

CHAICCLESAHT BAND.

Reserves.—The principal reserve of this band, and where the Indians reside, is named Acous (No. 1), is situated in Battle bay, Ououkinsh inlet, and comprises an area of 100 acres. The total reserves of this band amount to an area of 258 acres.

NITINAHT BAND.

Reserves.—The principal reserves of this band, and where the Indians reside, are named Tsooquanah (No. 2), Wyah (No. 3), Clo-oose (No. 4), and Carmanah (No. 6), all of which are situated at the entrance of the straits of Juan de Fuca and comprise an area of 773 acres. The total area of all their reserves is 1,790 acres.

PACHEENAHT BAND.

Reserves.—The principal reserve of this band, and where the Indians reside when at home, is named Pachena (No. 1), and is situated at the mouth of the San Juan river, at Port Renfrew, and comprises an area of 153 acres. Their total reserves comprise 404 acres.

REMARKS APPLYING TO THE WHOLE AGENCY.

Population.—The population of the various bands hereinbefore enumerated is as follows: Ahoussaht, 251; Clayoquot, 231; Chaicclesah, 67; Ehattisaht, 95; Ewl-huilhlaht, 140; Heshquiat, 146; Howehukliset, 36; Kelsemaht, 72; Kyuquot, 257; Matchilaht, 62; Moachaht, 153; Nitinat, 198; Noochatlaht, 52; Ohlat, 145; Opitchesaht, 48; Pachenaht, 54; Toquot, 25; Tseshah, 125; making a total of 2,157.

Health and Sanitation.—During the past year while there has been no outbreak of a serious disease such as small-pox or fever, yet the death-rate has been a very high one. Influenza, whooping-cough and mumps were prevalent in nearly all the bands during some part of the winter or spring, and while the deaths at any one place and time were not so numerous as to attract much attention, yet when the statistics were compiled, a heavy death-rate was shown. A few cases of measles occurred, but without fatal results. In one band a number of children died from what appeared to be a type of croup. Consumption, while claiming a number of victims as always, did not carry off so many as in the previous year. The death-roll is also largely augmented by the fact that a sealing schooner having on board Indian hunters, was presumably lost at sea, with all hands, never having returned from the Behring sea. Besides the actual deaths involved, the loss of so many of the best young men of the band has a paralyzing effect upon the prosperity and population of the bands concerned for many years to come. Some attention has been paid to vaccination, a number of Indian children having been vaccinated during the year. I have endeavoured to interest the Indians in looking better after their water-supply, and the department has encouraged them by, in some instances, giving pumps for wells, and in others by providing lumber to make simple flumes to bring pure water into the reserves.

Resources and Occupations.—During the winter months the Indians do but little work and are mostly at home on their various reserves or visiting neighbouring bands. The almost incessant wet and stormy weather would prevent much outdoor work even if such were available. In one or two localities, for the last two years, they have made

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some money during the spring months catching the large spring salmon, which can then be obtained in certain waters in the agency. The salmon are not canned but cured or salted by a special process and shipped in barrels to distant markets, much of it going to Germany. In April a number of Indians sign on sealing schooners as hunters. The schooners proceed down towards the Californian coast in search of seal, and follow the herds up the coast. The season closes at the end of May. Indians are allowed to continue to seal off shore in their own canoes only, and if the weather is good during May and June, will go out as far as 20 miles from shore in the open ocean, but take considerable risk in so doing, as the weather is at all times uncertain, and they might encounter a storm and perish before they could regain the shore. The results from this off-shore sealing are very uncertain, depending partly on the weather and also on whether the seal herds happen to come fairly well in towards shore. Two years ago the seals came very close in and the Indians in that particular district did very well, the Hesquiat band, in particular, securing a large number. This year but very few have been obtained, but the prices have ruled very high, as much as \$22 having been paid for the best skin. While engaged on the sealing schooners the Indians this season will obtain \$8 for each skin, which is the highest price yet paid by the owners of the schooners, who are at considerable expense and risk, as they provide the schooner to take the Indians to the grounds and also board the Indians. About the beginning of July the schooners start on the second cruise of the season, to Behring sea, where the season opens on August 1. The schooners leave there early in October, hoping to get home before the fall storms commence.

Those Indians who do not go sealing will leave about the end of June or early in July for canneries on the Fraser or at Rivers Inlet, where the men catch salmon for the canneries and the women work inside the canneries cleaning fish and doing other work connected with the canning industry. When the season is over, the Indians will either return home, or, if they have not done well, proceed to the hop-fields in the state of Washington, where a few weeks' remunerative work can generally be obtained. After that they will return home. Sometimes, if very destitute, a portion of a band will remain in Washington state for the winter, where they can get a limited amount of employment digging clams.

With the recent erection of new saw-mills in the agency, a small number of Indians have obtained very remunerative work in the logging camps. A very small number sometimes get a little work acting as guides or packers to sportsmen or prospectors. During the winter months the women often engage in the manufacture of baskets made out of the inner bark of the cedar-tree, which, being gaily coloured, and being a distinct novelty, are readily disposed of in the larger towns in the state of Washington to eastern tourists.

Buildings.—With the exception of the Ohiat band, which obtained the price of the lumber from a band fund in the hands of the department, but few new buildings have been erected during the past year. The price of purchased lumber and freight rates on the same have ruled high, and there have been no wrecks of lumber-laden ships on the coast, which sometimes affords the Indians an opportunity to pick up a quantity of derelict lumber.

The Indians have almost entirely ceased building the huge old-fashioned Indian houses which can still be seen on all the reserves, with beams consisting of whole trees which it is a wonder the Indians with their primitive appliances ever managed to raise into position, and large enough to accommodate a whole band. Generally speaking, an Indian will nowadays only build a house for his own accommodation and of reasonable dimensions, with proper windows, &c.

Stock and Farm Implements.—There are practically only three bands in this agency which own lands which, by much work, could partially be made available for farming. The Tseshaht and Opitchesaht bands at Alberni possess a few horses and collectively own a plough and a set of harrows, but do very little with them. Having to go away every summer to earn money prevents them taking much interest in put-

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ting in any crops, even their little gardens being often spoilt in their absence. The Ohiat band own a number of cattle, which run at large in the bush and are consequently somewhat wild and difficult to control. Occasionally they will be able to shoot one, but Indians are not as a rule very fond of meat, unless venison.

Education.—There are in this agency one industrial, two boarding and seven day schools.

Industrial School.—This is situated on Meares island, near Clayoquot, and is in charge of the Roman Catholic Church. The principal is the Rev. Father Maurus, O.S.B., and the matron is Sister Placide. Other Sisters are in charge of the cooking, laundry and sewing-room. An experienced instructor, Mr. Swain, looks after the manual training of the boys.

During the year the school, aided by a grant from the department, has installed a complete system of hot water heating. Radiators are distributed wherever required throughout the whole building, and the result is a very fine heating plant, much superior to the hot-air system to be found in some schools. The school has also installed thorough lavatory accommodation throughout the whole building, being able to do so even on the third story owing to the fine water-supply and strong pressure obtained by tapping a stream about a mile and a half in rear of the school. The school is now most thoroughly equipped, and, it may be added, excellently managed. In these institutions very much of the success of the work depends on the character and ability of those at the head of it, and in this case the school is exceptionally fortunate in that respect.

The school receives a per capita grant from the department for not more than 50 pupils, but there are generally from 60 to 70 children in attendance, those beyond the number of 50 being kept entirely at the expense of the school.

Boarding Schools.—These are situated at Alberni and Ahoussaht. Both are under the control of the Presbyterian Church. At Alberni the per capita grant is for 50 pupils, but the attendance has not reached that number yet; at present it is 36. At Ahoussaht the grant is for 25 pupils, with an attendance of 35 to 38 pupils.

At Alberni is some three or four acres of a garden, the work of which is performed by the older pupils. The ground is well managed and gives very good results.

At Ahoussaht the work has been undertaken of draining a lake of some ten or fifteen acres. When completed it is expected that that amount of good soil will be available for cultivation, which would be an excellent arrangement for the school, as nothing could be better for Indian children, with their too often impure blood, than an abundant supply of fresh fruit, vegetables and milk.

Day Schools.—There are seven day schools in this agency, located as follows: Kyuquot, taught by Rev. E. Sobry; Nootka, taught by Rev. A. S. Stern; Clayoquot, taught by Rev. C. Moser, all of the Roman Catholic faith; at Clayoquot, taught by Rev. W. J. Stone; Nitinat, taught by Mr. C. A. Dockstader, both of the Methodist Church; at Ucluelet, taught by Mrs. Swartout; Ohiat, taught by Mr. J. T. Ross, both of the Presbyterian Church. All the above teachers are doing their best to impart an education to the Indian children, but all are more or less handicapped by the irregular attendance caused by the parents taking their children away with them when they have occasion to move to some other reserve. In some cases the teacher follows the band and opens school there, but this can only be done when practically the whole band moves to the same reserve, and not when, as often happens, they scatter to different reserves.

It must, however, be remembered that in addition to their teaching duties, all the day school teachers also act as missionaries to the bands among whom they dwell, and their religious instruction on Sundays and otherwise reach the adult members of the bands as well as the children, and their constant presence and example is undoubtedly an encouragement to those Indians who are disposed to do right and a deterrent to the evil-minded.

As a whole, most of the Indians would like to see their children educated, but as regards day schools, the attendance is irregular for the reasons given above, and even

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when in the vicinity of a school, it is too often left to the inclination of the child, it being entirely against the customs of the Indians to use pressure, far less force, to make their children do anything against their inclination. More of the Indians would sign their children into the various boarding schools, but they think the time is too long to be separated from them. They would agree to part with them for, say five years, but think that to put a child into the school at seven or eight years of age, and not get it out again until it is eighteen years old is too long.

Characteristics and Progress.—These Indians are of a peaceable character and dread getting into conflict with the law. No serious crime has occurred during the past year. Drinking, gambling and abandoning their wives are their principal offences. While they do not take kindly to steady manual work on land, yet during the sealing or fishing season they work with fair industry; but as they are practically all wage-earners, their property from year to year depends largely on conditions which they cannot control. For instance, they catch salmon on the Fraser river during the season for so much a fish. If the season and the run of salmon is a poor one, they will make very poor wages, no matter how great their industry. So also in the sealing industry; they are paid a fixed price per skin, and in a season when seals are scarce will make small wages through no fault of their own. This last year shows a reduction of nearly thirty per cent on their earnings from sealing, due for the most part to the fact that they obtained but few seals off-shore from their own canoes, while the previous year they got a large number.

Temperance and Morality.—Among most of these Indians temperance is not so much a principle as a matter of environment and opportunity. Many of them who would make no great effort to obtain intoxicants would very readily make use of them if opportunity offered; and, if available, the prospect of a fine being imposed would not deter them from getting drunk, but these same men would be quite pleased to see strict precautions taken to prevent whisky being introduced on to their reserves. I think this might be said to be the position of the majority of the Indians. There are two classes of exceptions: a worthy few who would not touch liquor under any conditions, and also a few who never miss a chance of getting drunk. This latter class can not be described as habitual drunkards, as they do not succeed often enough in getting liquor for that, and there is no doubt that there is not enough drunkenness to affect materially the general health or prosperity of the population.

The morality of these Indians must be considered as fairly good considering their state of civilization. They have a bad habit of abandoning their wives and taking others. As this is a very old custom and is regarded by them as an equivalent to a white man's divorce, it can not be stopped unless by special enactment. Quite recently a test case was made of an Indian who had abandoned his wife and taken another woman. He was charged with bigamy and tried before the Supreme Court of British Columbia, but was acquitted practically on the ground that if an Indian marriage was to be recognized as binding, so also must be recognized their form of divorce.

I have, &c.,

A. W. NEILL,

Indian Agent.

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BRITISH COLUMBIA,

WILLIAMS LAKE AGENCY,

CLINTON, July 14, 1906.

FRANK PEDLEY, Esq.,

Deputy Supt. General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my annual report for the year ended June 30, 1906, together with a statement of statistics and a list of government property in my charge.

Location.—The Williams Lake agency is situated north and partly west of the Kamloops-Okanagan agency, south of the Babine agency, having the Rocky mountains as a portion of its eastern boundary and the Fraser agency for its western boundary. This agency contains an aggregate of 90,080 acres.

Population.—The population of this agency is 1,978.

ALEXANDRIA BAND.

Reserve.—The reserve of this band is situated on both sides of the Fraser river about 400 miles from its mouth. It contains an area of 1,355½ acres. Its natural features are good grazing bench-lands, all requiring irrigation when cultivated. There are also good hay meadows on this reserve.

Population.—This band has a population of 52.

Health and Sanitation.—The health of this band has been good. They have comfortable houses, which are kept in good condition.

Resources and Occupations.—The chief occupations of these Indians are hunting fur-bearing animals, farming, and working as farm-hands with white settlers.

Buildings, Stock and Farm Implements.—They have good dwellings and horse-stables. They have a few good horses, some cattle and a fair supply of farm implements.

Education.—A number of children from this band have attended the Williams Lake industrial school, and have made good progress, the parents taking great interest in their education.

Characteristics and Progress.—They are law-abiding and industrious, and making fair progress.

Temperance and Morality.—They are moral, and are not much given to intemperance.

ALKALI LAKE BAND.

Reserve.—This reserve is situated on a bench a few miles east of the Fraser river, 320 miles from its mouth. It contains 8,347½ acres. There is good farming land on this reserve, but water for irrigation is not available, and in consequence only a small portion is cultivated. It is nearly all under fence and used for pasture. There are excellent hay meadows on the reserve, from which large quantities of hay are cut every year. The natural features are bench-lands and excellent hay meadows.

Population.—The population of this band is 172.

Health and Sanitation.—The general health has been good. No epidemic has visited them. The Indians have been vaccinated, and sanitation is good. Their houses are clean and well ventilated.

Occupations.—Farming, stock-raising, and working as farm-hands, cattle drovers, and packers with white settlers are their chief occupations.

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Buildings, Stock and Farm Implements.—They have good dwellings and horse-stables; good horses, quite a number of cattle and pigs, and are well supplied with farm implements.

Education.—Quite a number of children of this band are being educated at the Williams Lake industrial school.

Characteristics and Progress.—These Indians are very industrious and law-abiding, and are making good progress.

Temperance and Morality.—They are moral and temperate.

ANAHAM BAND.

Reserve.—The reserve of this band is situated in a valley near the Chilcoten river, about 50 miles from its mouth. It has an area of 9,922 acres. The natural features are open bench-lands, excellent hay meadows and fair timber.

Population.—The population of this band is 219.

Health and Sanitation.—No epidemic has visited them, the general health has been good and sanitation good.

Occupations.—The chief occupations of these Indians are farming, stock-raising, freighting and working as farm-hands, cowboys, and packers with white settlers.

Buildings, Stock and Farm Implements.—They have good dwellings, good horse-stables, good horses, cattle and pigs. They are well supplied with farm implements of all kinds, including freight and spring wagons, mowers and self-binders.

Education.—There are a few children from this band attending school at the Williams Lake industrial school, and lately the parents seem to be much interested in education.

Characteristics and Progress.—They are excellent workers and are making steady progress.

Temperance and Morality.—They are temperate and moral.

ANDERSON LAKE BAND.

Reserve.—This is situated at the upper end of Anderson lake, being the most southerly part of the agency. It has an area of 504 acres. The natural features are good bottom-lands, good hay meadows, excellent timber and good grazing lands.

Population.—The population of this band is 67.

Health and Sanitation.—The health of this band has been good. Their dwellings and surroundings are in good condition. The Indians have been vaccinated.

Occupations.—They farm a little, have good vegetable and fruit gardens, gold mine some, work in salmon factories and hatcheries. The women are expert basket-makers, for which a ready market is obtained from tourists.

Buildings, Stock and Farm Implements.—They have good dwellings and horse-stables, a number of horses and cattle, and a good supply of farm implements.

Education.—None of the children of this band have ever received any education.

Characteristics and Progress.—They are industrious and law-abiding and make a comfortable living.

Temperance and Morality.—They are temperate and moral.

BRIDGE RIVER BAND.

Reserves.—The reserves of this band are along the left banks of the Fraser and Bridge rivers. The lands fit for cultivation are in small patches where good crops of grain and vegetables are raised. The total area of the reserves is 9,761 acres. The natural features are bench-lands following the rivers, all requiring irrigation when cultivated. There are very good grazing lands on the mountain sides.

Population.—The population is 104.

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Health and Sanitation.—The general health has been good. No epidemic has visited them. They have been vaccinated and sanitation is good.

Occupations.—They farm considerably, working as labourers with white settlers, act as guides to hunters and tourists, and also gold mine a little.

Buildings, Stock and Farm Implements.—They have good dwellings and horse-stables, good horses, a few cattle and pigs, and are well supplied with all kinds of farm implements.

Education.—None of the children of this band have ever received any education.

Characteristics and Progress.—They are very industrious and law-abiding, and making fair progress.

Temperance and Morality.—They are a temperate and moral people.

CANOE CREEK BAND.

Reserve.—This reserve is situated on a small stream which empties into the Fraser river 300 miles from its mouth. They have good agricultural lands, but water for irrigation is scarce, and only a very small portion is cultivated. They have an area of 16,129 acres. The natural features are open bench-lands, good grazing and fair timber lands, good hay meadows from which they cut considerable hay.

Population.—The population of this band is 163.

Health and Sanitation.—The health of this band has been good. Sanitary conditions are good and no epidemic has appeared amongst them.

Occupations.—Farming, working with white settlers as labourers at various occupations, and hunting and fishing are their chief occupations.

Buildings, Stock and Farm Implements.—They have fairly good dwellings and horse-stables, a large number of horses, a few cattle and pigs, and a good supply of farm implements.

Education.—A number of children from this band are being educated at the Williams Lake industrial school.

Temperance and Morality.—They are moral. In the matter of abstaining from intoxicants there is a decided improvement.

Characteristics and Progress.—They are industrious and making fair progress.

CAYOOSH CREEK BAND NO. 1.

Reserve.—This reserve is situated at the mouth of Cayoosh creek where it joins the Fraser river, 220 miles from its mouth. It contains 367 acres.

Population.—The population of this band is 30.

Health and Sanitation.—The health of this band has been good. They have all been vaccinated, and sanitation is good.

Occupations.—Farming, fishing, hunting, gold mining and working as labourers with white settlers are their principal occupations.

Buildings, Stock and Farm Implements.—They have comfortable dwellings, good horse-stables. They have a few horses and cattle and a fair supply of farm implements.

Education.—A few of the children of this band have attended the public school near Lillooet.

Characteristics and Progress.—They are industrious and are making good progress.

Temperance and Morality.—They are moral and temperate.

CAYOOSH CREEK BAND NO. 2.

Reserve.—This reserve is situated about 4 miles from Cayoosh Creek No. 1 reserve, on a bench above the Fraser river. It contains 785 acres. The natural features are open bench-lands and good grazing lands along the mountain sides.

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Population.—The population is 12.

Health and Sanitation.—Their health has been good. No epidemic of any kind visited them.

Occupations.—Farming, hunting and fishing are the principal occupations of these people.

Buildings, Stock and Farm Implements.—They have good dwellings, good horse-stables, a few horses, cattle and pigs, and a fair supply of farm implements.

Education.—A few children from this band have attended the public school near Lillooet.

Characteristics and Progress.—They are law-abiding and industrious, and are making good progress.

Temperance and Morality.—They are temperate and moral.

CLINTON BAND.

Reserve.—This reserve is situated in the Clinton valley, and contains 1,073 acres. The natural features are small flats and meadow-lands along the banks of a small stream running through the reserve, and timbered mountain slopes afford good grazing.

Population.—The population of this band is 50.

Health and Sanitation.—The health of this band has been good. They have been vaccinated. Their houses are comfortable and well ventilated.

Occupations.—Farming, working as labourers with white settlers, hunting, fishing, and in winter cutting and hauling fire-wood to the Clinton village, are the chief occupations of this band.

Buildings, Stock and Farm Implements.—They have good dwellings and horse-stables, a fair class of horses, a few cattle, and a good supply of farm implements.

Education.—Some children from this band attended the public school.

Characteristics and Progress.—They are industrious, and make a comfortable living.

Temperance and Morality.—They are temperate and moral.

DOG CREEK BAND.

Reserve.—This reserve is situated on a stream of that name which flows into the Fraser river 3 miles from the village. It contains 1,371½ acres. The natural features are open bench-lands, which require irrigation, and good grazing lands on the hills and mountain slopes.

Population.—The population of this band is 20.

Health and Sanitation.—The health of this band has been good. The sanitation conditions are good.

Occupations.—Farming, hunting and fishing are the chief occupations.

Education.—A few children from this band have attended the Williams Lake industrial school; pupils made good progress.

Characteristics and Progress.—They are industrious and law-abiding, and making fair progress.

Temperance and Morality.—Their record in this respect is much improved during the year. There have been no complaints.

FOUNTAIN BAND.

Reserve.—This reserve is situated on the east bank of the Fraser river, 250 miles from its mouth. It contains an area of 1,864 acres. The natural features are open bench-lands and good grazing lands.

Health and Sanitation.—The general health of these Indians has been good. No epidemic diseases visited them. Vaccination has been attended to, and sanitation is good.

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Population.—The population of this band is 209.

Occupations.—These Indians farm considerably, and are employed by white settlers as labourers at various occupations. They also hunt and fish, and when the conditions of the Fraser river are favourable take out considerable quantities of gold dust.

Buildings, Stock and Farm Implements.—They have good dwellings and horse-stables, a few good horses, cattle and pigs, and a good supply of farm implements.

Education.—A few children from this band received some education at St. Mary's Mission.

Characteristics and Progress.—They are industrious and law-abiding, and making fair progress.

Temperance and Morality.—They are temperate and moral.

HIGH BAR BAND.

Reserve.—This reserve is situated on the east and west banks of the Fraser river, and contains an area of 2,924 acres.

Population.—The population of this band is 55.

Health and Sanitation.—The health of this band has been good. The sanitary conditions are good.

Buildings, Stock and Farm Implements.—They have a good class of dwellings and horse-stables, a number of horses, a few head of cattle, and a fair supply of farm implements.

Occupations.—Farming, gardening, fishing and hunting are their chief occupations, and quite a number find employment with white men as farm-hands. They also gold mine in the Fraser river during low water.

Characteristics and Progress.—They are law-abiding and making a fair living.

Education.—None of the children of this band have received any education.

Temperance and Morality.—They are temperate and moral.

* KANIM LAKE BAND.

Reserve.—This reserve is situated in the Bridge Creek valley, 20 miles east of the Cariloo wagon road, and contains 4,560 acres. The natural features are bench and meadow-lands along the creek bottoms, good grazing-lands and excellent hay meadows. The remainder of the reserve is covered with good timber.

Population.—The population of this band is 77.

Health and Sanitation.—No epidemic diseases visited them. They have been vaccinated. Sanitary conditions are good.

Buildings, Stock and Farm Implements.—They have good dwellings and horse-stables, a good class of horses, cattle and pigs, and are well supplied with all kinds of farm implements.

Occupations.—Farming, stock-raising, working as farm-hands with white settlers, trapping, fishing and hunting are the chief occupations of this band.

Education.—Most of the children of this band have attended the Williams Lake industrial school, where they made good progress.

Characteristics and Progress.—They are industrious and law-abiding and are making good progress.

Temperance and Morality.—They are temperate and moral.

LILLOOET BAND NO. 1.

Reserve.—A portion of this reserve is situated on the west bank of the Fraser river, the remainder on the east side, and contains 1,418½ acres. The natural features are good bench-lands suitable for cultivation, but owing to the scarcity of water for irrigation, there is not much land under cultivation. There is good grazing and fair timber lands.

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Population.—The population of this band is 58.

Health and Sanitation.—The health of these Indians has been good; no epidemic diseases amongst them. Sanitary conditions are good, and the Indians are regularly vaccinated.

Occupations.—The occupations are farming, gold mining, hunting, fishing, working as labourers with white settlers, freighting, cutting fire-wood and acting as guides to hunters in search of big game such as bear, mountain sheep and goats.

Buildings, Stock and Farm Implements.—They have a good class of dwellings, good horse-stables, horses, cattle and pigs and a good supply of farm implements.

Education.—A few of the children from this band have attended the public school at Lillooet.

Characteristics and Progress.—They are industrious and the majority of them earn a comfortable living.

Temperance and Morality.—As a rule they are moral and temperate, but I regret to say that during the year there have been quite a number brought before the justices for drunkenness, but I am pleased to say that the persons furnishing the intoxicant were severely punished.

LILLOOET BAND NO. 2.

Reserve.—This reserve is situated on the west bank of the Fraser river, about 12 miles from the village of Lillooet, and contains 544 acres.

Population.—The population of this band is 8.

Health and Sanitation.—The health of these Indians has been good. Sanitary conditions are favourable, and dwellings extra clean.

Occupations.—Farming, gardening and occasionally gold mining are their chief occupations.

Buildings, Stock and Farm Implements.—They have good dwellings and horse-stables, a few horses and a fair supply of farm implements.

Education.—A few children from this band attend the public school.

Characteristics and Progress.—They are industrious and law-abiding.

Temperance and Morality.—They are temperate and moral.

PAVILION BAND.

Reserve.—This reserve is situated both on the east and west sides of the Fraser river, and contains 4,136 acres. Its natural features are good bench-lands, good grazing and fair timber lands.

Population.—The population of this band is 68.

Health and Sanitation.—The health of this band has been good. The Indians have been vaccinated. Sanitary conditions are good.

Occupations.—Farming, fishing, hunting and working as farm-hands with white settlers are their chief occupations.

Stock and Farm Implements.—These Indians have a great number of horses, quite a number of cattle and pigs, and are well supplied with farm implements.

Education.—None of the children of this band have ever received any education.

Characteristics and Progress.—They are industrious and law-abiding and making fair progress.

Temperance and Morality.—They are moral and temperate.

QUESNEL BAND.

Reserve.—This reserve is situated on the east and west sides of the Fraser river, 3 miles from the village of Quesnel. It contains 1,687½ acres. Its natural features are flat benches along the Fraser river, the upper benches being covered with heavy timber.

Population.—The population of this band is 58.

Health and Sanitation.—There has been no epidemic disease at this reserve. On

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account of so many deaths for the last few years the Indians on the portion of the reserve where they lived feared the place was unhealthy, and a majority of them have removed farther east on the reserve, about 2 miles from the old village.

Occupations.—Their chief occupations are hunting, fishing, trapping, boating, and a few work as farm-hands with white settlers.

Buildings, Stock and Farm Implements.—They have a fair class of dwellings and horse-stables, a few horses and sufficient farm implements for their wants.

Education.—A few children from this band are being educated at the Williams Lake industrial school.

Characteristics and Progress.—They are law-abiding, but the majority do not take kindly to the cultivation of their lands, preferring to hunt, fish and trap for a living.

Temperance and Morality.—There is not much to complain of in this respect.

SETON LAKE, OR MISSION BAND, NO. 1.

Reserve.—This reserve is situated on the west side of Seton lake, and contains 2,085 acres. Its natural features are open bench-lands, timbered mountain slopes and poor grazing-lands.

Population.—The population of this band is 73.

Health and Sanitation.—The health of this band has been good. No epidemic visited them. Sanitary precautions are well observed.

Occupations.—Farming, gardening, packing, hunting, fishing, boating and gold mining are their principal occupations.

Buildings, Stock and Farm Implements.—They have fair dwellings and horse-stables, a few horses and cattle, and a fair supply of farm implements.

Education.—None of the children from this band have received any education.

Characteristics and Progress.—They are industrious and law-abiding. Owing to the scarcity of water for irrigation they are unable to cultivate much land.

Temperance and Morality.—They are temperate and moral.

SETON LAKE, OR ENIAS BAND, NO. 2.

Reserve.—This reserve is on the east and west sides of Seton lake, and contains 188 acres. There is only one man on this reserve, depending chiefly on fishing and government support; being badly crippled, he is unable to work.

SETON LAKE, OR SLOSH BAND, NO. 5.

Reserve.—This reserve is situated at the head of Seton lake, and contains 80 acres. Its natural features are bench-lands surrounded by high mountains heavily timbered.

Population.—The population of this band is 35.

Health and Sanitation.—The general health has been good; there has been no epidemic amongst them. All have been vaccinated.

Occupations.—Farming, gardening, boating, hunting, fishing and packing are principally their occupations.

Buildings, Stock and Farm Implements.—They have a fair class of dwellings and horse-stables, good horses and a fair herd of cattle, and a fair supply of farm implements.

Education.—None of the children of this band have received any education.

Temperance and Morality.—They are temperate and moral.

SETON LAKE, OR NECAIT BAND, NO. 6.

Reserve.—This reserve is situated at the foot of Anderson lake and contains 84 acres. Its natural features are bench-lands surrounded by high mountains heavily timbered.

Population.—The population of this band is 50.

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Health and Sanitation.—The general health of this band has been good. No epidemics visited them. They have been vaccinated, and their dwellings are in good order.

Occupations.—Farming, gardening, freighting on boats and canoes, hunting, fishing, trapping and working as labourers at various occupations.

Buildings, Stock and Farm Implements.—They have a good class of dwellings and horse-stables, a few horses and cattle, and a fair supply of farm implements.

Characteristics and Progress.—They are industrious and law-abiding, and make a comfortable living.

Education.—None of the children from this band have ever received any education.

Temperance and Morality.—They are temperate and moral.

SODA CREEK BAND.

Reserve.—A portion of this reserve is situated on the east side of the Fraser river, and the remainder along the Cariboo wagon-road about 14 miles from the former. It contains 5,210 acres. Its natural features in the portion along the Fraser river are bench-lands, while the portion along the Cariboo wagon-road is meadow-land. There is good grazing at both places and good timber.

Population.—The population of this band is 81.

Health and Sanitation.—There has been no epidemic among these Indians. They have been vaccinated, and their dwellings are clean and well ventilated.

Occupations.—Farming, teaming, working as farm-hands with white settlers, hunting, fishing and trapping are their principal occupations.

Buildings, Stock and Farm Implements.—They have some good dwellings and horse-stables, good horses and cattle, and are well supplied with all kinds of farm implements.

Characteristics and Progress.—They are very industrious, and are making good progress.

Education.—Some of the children from this band have been educated at the Williams Lake industrial school, where they made good progress.

Temperance and Morality.—They are moral, but a couple are inclined to the use of intoxicants.

STONE BAND.

Reserve.—The reserve of this band is situated on the west bank of the Chilcoten river, and has an area of 4,225 acres. Its natural features are bench-lands, good grazing lands and hay meadows.

Population.—The population of this band is 99.

Health and Sanitation.—The health of this band has been good. Dwellings and surroundings are kept in good order, and sanitation good.

Buildings, Stock and Farm Implements.—They have good dwellings and horse-stables, good horses, a few head of cattle, and a fair supply of farm implements.

Occupations.—Farming, hunting, fishing, trapping and working as labourers at various occupations with white settlers.

Characteristics and Progress.—These Indians are not particularly fond of cultivating their lands, and pay more attention to hunting, fishing and trapping. Lately, however, they are doing better.

Education.—None of the children of this band have received any education.

Temperance and Morality.—They are temperate and moral.

TOOSEY BAND.

Reserve.—This reserve is situated on Riskie creek, a small stream flowing into the Chilcoten river. It contains 6,352½ acres. Its natural features are bench-lands, good grazing lands and hay meadows.

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Population.—The population of this band is 62.

Health and Sanitation.—The health of this band has been good; dwellings and surroundings in good order.

Occupations.—Farming, trapping, fishing, hunting, and working as farm-hands and cowboys with white settlers are their principal occupations.

Buildings, Stock and Farm Implements.—They have good dwellings and horse-stables, good horses and cattle, and well supplied with farm implements.

Education.—None of the children of this band have received any education.

Characteristics and Progress.—They are industrious and law-abiding, and making steady progress.

Temperance and Morality.—They are moral and temperate.

WILLIAMS LAKE BAND.

Reserve.—The reserve of this band is situated in the Williams Lake valley. It contains 4,612½ acres. Its natural features are good bottom-lands and excellent hay meadows, surrounded by good grazing lands.

Population.—The population of this band is 155.

Health and Sanitation.—The general health was good. No epidemic diseases visited them; they have been vaccinated; their dwellings are clean and well ventilated.

Occupations.—Farming, gardening, teaming, hunting and fishing are their principal occupations. Some of the young men find employment as farm-hands with white settlers.

Buildings, Stock and Farm Implements.—They have good dwellings and horse-stables, horses, cattle and pigs, and are well supplied with all kinds of farm implements.

Education.—Most of the children of this band have received the benefit of education at the Williams Lake industrial school.

Characteristics and Progress.—They are good workers; very industrious and law-abiding and are making steady progress.

Temperance and Morality.—As a rule they are moral and temperate, but I regret to report that one or two have been sentenced for drunkenness lately.

GENERAL REMARKS.

I regret to report that the year just closed has not been a very prosperous one for the Indians of this agency. Owing to the very dry season and the absence of water for irrigation at most of the reserves, the grain and root crops were almost a complete failure, many not getting the quantities sowed and planted.

The run of salmon in the rivers and streams was enormous, and the Indians took advantage of this by securing large quantities, which in a measure partly made up for the loss of their crops.

The catch in fur-bearing animals was better than for many years, and good prices obtained for pelts.

The industrial school at Williams Lake has fully kept up its reputation as a successful institution, being kept well supplied with pupils, in fact quite a number over what is required.

The principal and teachers in charge of this school deserve the highest praise for their patience and perseverance in the discharge of their duties.

I have, &c.,

E. BELL,

Indian Agent.

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BRITISH COLUMBIA,
INDIAN SUPERINTENDENT'S OFFICE,
VICTORIA, July 19, 1906.

FRANK PÉDLEY, Esq.,
Deputy Supt. General of Indian Affairs,
Ottawa.

SIR,—I have the honour to forward my annual report upon Indian affairs in the province of British Columbia for the year ended June 30, 1906.

The different reports, together with the statistical statements received from the respective Indian agents, as well as the returns, &c., from the industrial and boarding schools established in this superintendency have been, as they arrived, forwarded without delay, for the information of the department, and it is satisfactory to be able to state that notwithstanding the unusually early date upon which these reports and returns were required this year, the agents and the principals have promptly responded to the instructions given them to that effect.

The particulars following the various classifications adopted by the department will, I hope, prove acceptable as illustrating to a certain extent the satisfactory progress being made by the Indians towards attaining that status in the ranks of civilized communities which it is the desire of all working in their interest should result from the care and attention bestowed upon them.

Population.—There has been a slight decrease during the past year. Particulars will be found in the statistical returns forwarded.

Health and Sanitation.—The returns from some of the agencies show an increase in the number of deaths over last year, although on the whole no very serious or extended epidemics prevailed. Whooping-cough and tuberculosis carried off several children in the Northwest Coast agency, and whooping-cough, mumps, grippe and a type of croup proved fatal in many cases on the west coast. There was also a slight epidemic of whooping-cough at the Sechelt village in the Fraser agency, which caused the death of some of the young people. In other agencies the general health of the Indians has been on the whole satisfactory.

In the interests of improved sanitation everything possible is being done, and owing to the increasing intelligence of the Indians regarding such matters, the general spread of such useful knowledge as may help them in that direction is becoming more extensive each year.

Vaccination has been attended to, it is hoped, with good results, and although some of the natives strongly object to the operation, the majority, realizing the benefits to be derived, &c., make no serious objection.

Resources and Occupations.—Under this head may be enumerated the following occupations and pursuits, &c.: canning salmon, clams and other fish-products on a limited scale; as fishermen and at other employments in connection with the canneries during the fishing season; fur-sealing on their own account, and as hunters on schooners owned by white men; curing salmon, halibut and other fish-products for sale and for home consumption; catching fish and hunting game in season, which they sell profitably in different cities and towns; building fishing-boats and other craft, as well as canoes for their own use and for sale; manufacturing dog-fish and oulachon oil; farming, gardening and working as farm-hands on the ranches of their white neighbours; stock-raising and employment as cowboys on many of the cattle ranches; logging on their own account and working in saw-mills; employment as trimmers on ships, loading coal, for which they are paid from \$3 to \$5 a day; loading lumber on ships for export, at which they earn equally high wages; as sectionmen on railways,

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and labourers on provincial roads; as guides to hunters, miners and others; mining on their own account and for hire; hop-picking, dairying on their own reserves; fruit-culture; poultry-raising; making curios (mostly during the winter season), copied from ancient native models, for which they find a ready sale to tourists; working as carpenters, and in various capacities, chiefly in new towns springing up all over the province; cutting cord-wood for sale to canneries and to steamboat-owners on Crown lands; acting as interpreters; as lighthouse-keepers, and engaging from time to time in all such desultory occupations wherefrom they expect to derive sufficient remuneration to recompense them for their labour. The Indian women, it may be remarked, are also money-earners to no inconsiderable extent. During the canning season and at the hop-fields they find profitable employment; they engage extensively in the manufacture of baskets, which they dispose of profitably to tourists and others; they cure and dress deer and cariboo skins, out of which they make gloves and moccasins; and they frequently find a market for dressed skins intact, they being useful for many purposes; mats from the inner bark of the cedar and of rags are also made, some of which are of an attractive and superior quality; they make their own and their children's clothing, being much assisted in the latter by sewing and knitting machines; they also gather large quantities of berries, which in some cases they sell among the white people, a major portion is, however, dried for winter use; in doing chores and laundry work for their white neighbours they also find considerable employment.

Buildings.—There is a steady increase in the number of improved dwelling-houses being occupied by the Indians each year, many of which are large and commodious two-story buildings, well painted and comfortably furnished. A great improvement is also noticeable in the class of farm buildings, outhouses, barns, &c., of recent construction. Residences of the cottage style are numerous, many of which are painted, and made attractive by little flower gardens with ornamental fencing, while others less pretentious go in for potted plants in the windows or on the verandahs, all of which as an indication of a certain refinement unknown to them in their earlier and less enlightened state, is most gratifying and encouraging to those who devote their best efforts to the upraising of these people.

Stock.—The breed of cattle and horses, where the land within the reserves is suitable for stock-raising purposes, is being each year improved, the fact having been realized that fairly well-bred animals can be readily sold and fetch good prices, whereas the poor animal is comparatively worthless and more or less destroys the range, which they are now realizing could be much more profitably utilized. Many of the more settled and advanced of the Indians have now sheep and pigs, which they find easy to keep and profitable, the raising of poultry is also general amongst many of the bands.

Farm Implements.—Owing to the influx of whites and many people of other nationalities who compete with the Indians in all branches of labour, each year it becomes more apparent that money is not so readily earned as formerly when naturally they were in greater demand; under these changed conditions they are becoming much more keen in the development of such resources as are within their reach upon their reserves, the result being that they give far more attention to gardening, farming and stock-raising, which ultimately must lead to a more extended and permanent prosperity. The good effects of such a knowledge have produced in many instances increased activity in the pursuits of the occupations last named, and in the course of a few years from now a marked advance will have taken place beneficially affecting all classes interested in this comparatively undeveloped country.

Education.—Under this head most satisfactory progress is being made in such localities as are provided with schools. The desire on the part of the parents of Indian children for the education of their offspring continues to increase each year, and in some places where Indian schools are not available the native children are allowed to attend the provincial public schools, where, by their good behaviour, neat appearance, cleanliness and attention to their studies, they give general satisfaction and cause no

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little surprise. A perusal of the full and interesting reports received from the school inspector and the principals of the industrial and boarding schools throughout this superintendency will fully repay all who are at all interested in such good works. During my visitation amongst the agencies I have been pleased to observe evidence of the many lasting benefits springing from the education and training received at one or other of these establishments.

Many of the Indian boys who have been so instructed are now engaged in teaching at their native villages and elsewhere, for the most part giving good satisfaction, and proving themselves capable of doing good work.

Stores are in operation at many of the reserves, the clerks being young men who have been educated at one or other of the Indian schools. Young native women trained at these institutions go out to service, and are much sought after, as nurse maids and general servants, &c., and give great satisfaction to their employers. In their own homes it is noticeable that those who have had the advantage of such training seem much more comfortably off, approaching closely the standard regulating the domestic arrangements observable in the houses of respectable white people of the labouring class. In the management of their farms, gardens, and in other industrial occupations, a method and thrift unknown to the older Indians prevails; the superstitious beliefs as well as many of the old-fashioned customs are, happily, dying out, and in the no distant future I feel assured that the barbarous and degrading customs referred to will have become, to a great extent at all events, but memories of the past. At the present time English is freely spoken by the rising generation, among the aborigines, whose most cherished aspiration is to become 'all the same as a white man.'

The day schools, as has been stated in other reports, are not as successful as it is desired they should be. To any one acquainted with the conditions governing the lives of many of the Indians this is not surprising. In their efforts to obtain the necessary means of support for themselves and families they are forced at certain seasons of the year to move from place to place, when it is necessary that they take all their belongings with them; in some of these migratory expeditions may be seen in the canoe, men, women, children, dogs, cats, chickens and ducks, &c., all stowed away somewhere. Under these circumstances regular attendance at school is impossible, and, to a great extent, the advantages derived from a few months' teaching are neutralized by a prolonged absence, when all that has been taught is forgotten. Where the Indians are so situated as to be able to remain at their reserves, and the children have the advantage of regular attendance, &c., the results are fairly good.

Religion.—It is most pleasing to be able to report that under this head the most satisfactory conditions exist. Religious observances and services are continually practised with praiseworthy devotion by the members of the different denominations to which they have become converts. Many of these who but a short time since were pagans are now among the most zealous in their worship according to the Christian belief; indeed, the simple childlike faith exhibited by very many of this primitive people is most amazing, and oftentimes bordering on the pathetic, affording an example that might profitably be followed by many of their civilized fellow Christians.

Chapels and churches are numerous throughout the different agencies, and even in the most remote places I find, when engaged in my periodical visitations, the village church, which from its situation can generally be seen from a long way off; its appearance together with the faint echoes of the sometimes tolling bell having a tendency to produce humane and reverential emotions in the breasts alike of the white man or the red, no matter how rough or wild may be the surroundings. Owing to the good and effective work of the missionaries, at the present time there are but few pagans among the Indians, over nine-tenths of the whole native population being now registered as members of one or other of the different religious denominations, the missionaries belonging to which, respectively, are doing such good work in British Columbia.

Character and Progress.—The native people continue to give evidence of considerable self-reliance and industry. As loggers, farm labourers, stockmen on cattle

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ranches, packers, sectionmen on railways, guides to hunting parties and others, and as boatmen, &c., &c., they are equal and in some respects superior to men of other races in many of these pursuits, invariably giving good satisfaction to their employers. In some places they turn out with teams and wagons, picks and shovels, and do considerable work on roads in the vicinity of their reserves.

As a rule they are all good handicraftsmen, and have in different localities constructed substantial bridges across rivers of considerable magnitude, performing such work in a manner worthy of skilled workmen. Incited by their increasing knowledge touching the value of the land upon their reserves, they have been, and are, erecting miles of good fencing, and realizing to a great extent that their future support will depend upon the land, are devoting year by year more attention to the working of the ground at their disposal. Where conditions are at all favourable, good crops are raised, carefully harvested and stored; their agricultural machinery and tools are well looked after, their stock provided for and kept in good condition as a rule.

Striking instances are not uncommon illustrating the capabilities of the natives as farmers and stock-raisers. In some cases individual Indians own large herds of as fine cattle and horses as can be seen on the majority of ranches worked and owned by white men; others, though not so well off, are striving in that direction, and the demand for more land is increasing as they advance. Many are willing to lease tracts of land for grazing purposes from the provincial government, but find it most difficult to do so. There are a few Indians who, possessed of a more progressive and independent spirit than others, have branched out for themselves, leaving their reserves, and the Indians, and settling upon pre-emptions which, through the favourable consideration of the Lieutenant Governor in Council, they have been allowed to take up under the British Columbia Land Act. As a rule these Indians do very well, and by their thrift and energy, &c., afford a wholesome object lesson to their less energetic and ambitious tribesmen. In many settlements to which reserves are closely situated the Indians are quickly getting into the ways of the white man, and take a lively interest in all such matters as affect the welfare of the community generally.

As is only natural, there are of course many whose temperament and environments being less favourable to such advancement, are slow in their approach towards civilization and independence. It is, however, only a matter of time with these people when eventually they will have settled down and taken to one or other of the many industrial occupations followed by their more enlightened white neighbours in their improved efforts to obtain the means of supporting a comfortable existence.

Temperance and Morality.—Under this head, considering the superintendency generally during the year reported upon, the indulgence in intoxicants by the Indians has been less than in former years; at Steveston, and along the Fraser during the canning season, a marked change for the better was noticeable, and this notwithstanding that it was a fairly profitable year, fish being plentiful. Indeed, I have heard that many people in that vicinity mentioned, as a complaint, that the natives were far too quiet and sober, &c. Except among some few of the bands it may safely be stated regarding their morality that they are deserving of all praise and free from any cause for censure, and were it not for the evil effects of intercourse with disreputable white men who often introduce, and cause the consumption of, intoxicants, the standard of morality among many of the bands would be higher than that of the civilized people who have taken possession of their country and who are held up to them as an example of all the virtues, &c.

The improved condition of the Indians as regards sobriety is certainly in a measure to be attributed to the good work done by the detective constables employed by the department. These officers have been most effective in prosecuting and bringing to justice many of the unscrupulous characters who follow the degraded occupation of selling intoxicants to the natives, and no doubt their vicinity had a deterrent effect upon many who otherwise would have participated in that nefarious traffic.

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General Remarks.—It is most satisfactory to be able to state that in nearly all the agencies except one, the West Coast, there has been a substantial increase in the earnings of the Indians during the past year. With some exceptions the crops were good and successfully harvested. Stock was well wintered and thriving; trappers, although not finding fur-bearing animals as plentiful as in other years in some districts, yet, on the whole did well, a very good price having been obtained for pelts. The run of salmon was exceptional, in some of the agencies described as enormous, the Indians putting up an abundance for their winter's food-supply.

Medicine and drugs, &c., have as usual been supplied to the agents and missionaries stationed in out-of-the-way places throughout the superintendency for dispensation among such of the Indians as were in need of that provision and unable otherwise to obtain such aid. Where it has been practicable, medical attendance has also been provided. The appointment, under salary, of professional medical gentlemen has been resultant of much good not only amongst the natives, but to people of other nationalities coming within the range of any of these medical officers. Such of the Indians as absolutely required assistance in that direction, have had food and clothing in reasonable quantities supplied to meet their needs.

The conduct of the Indians, with very few exceptions, and these caused by the maddening effects of intoxicants, has been worthy of commendation; they are law-abiding and peaceably disposed; living in harmony, as a rule, with their own people and the whites; they are remarkable in their respect for the laws governing the country, and ever ready to assist the authorities in maintaining law and order, and in the protection of life and property.

I have, &c.,

A. W. VOWELL,

Indian Superintendent for British Columbia.

BRITISH COLUMBIA,

REPORT OF INDIAN RESERVE COMMISSIONER,

VICTORIA, February 6, 1906.

FRANK PEDLEY, Esq.,

Deputy Supt. General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit for your information the following report in connection with the work performed by the Indian Reserve Commission and by the surveyors acting under my instructions during the year ended December 31, 1905.

On March 15, Surveyor Green was despatched to Bella Coola, there to superintend the construction of works for the protection of the banks of the river at that place, and he also, while on the ground, subdivided into 20-acre lots a portion of the Bella Coola reserve, completing the work named on April 11, after which he was employed to survey a townsite for the Indians resident at the head of Kitimat Arm, which occupied him until May 8, when he returned to Victoria on the first available steamer.

In August, under instructions, Surveyor Green proceeded to Eagle river, and there completed the survey of Cokqueneets reserve, No. 23, for the Sechelt Indians.

On March 7, I visited Hope for the purpose of defining some Indian fishing stations in that vicinity. Surveyor Green and the local Indian agent, Mr. McDonald, accompanied me, when, after an inspection of the ground, two reserves of small extent, but sufficient for the purpose intended, were allotted for the use of the Indians interested.

On June 12, Surveyor Green and I started for Cassiar to provide reserves for the Tahltan Indians, who had for a long time been solicitous that such protection against

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the always likely inroads of the thoughtless white man should be afforded them. Their principal village is situated about 11 miles from Telegraph creek, on the Stikine river, and about 1½ miles from the fishery, at the mouth of the Tahltan river, where from time immemorial the natives have been in the habit of taking salmon, &c.

The country round about is sterile, consisting mostly of lava beds and precipitous rocks, sand hills and gravel, with here and there an insignificant patch of poor soil.

Two reserves were laid off, which include their village and fishery, and also a winter hunting camp some little distance off in the hills. While on the ground the surveys were completed so that it might not be necessary to send a party of surveyors such a distance (about 900 miles) from Victoria later.

In November, Surveyor Ritchie was employed to survey the Indian reserve at Pemberton Meadows, defined by me on June 15, 1904. He was occupied at the above work for about six weeks. Detailed reports relating to all the work mentioned have from time to time been furnished the department.

I have, &c.,
A. W. VOWELL,
Indian Reserve Commissioner, B.C.

DEPARTMENT OF INDIAN AFFAIRS,
OTTAWA, September 19, 1906.

FRANK PEDLEY, Esq.,
Deputy Supt. General of Indian Affairs,
Ottawa.

SIR,—I beg to present my report as Chief Medical Officer, for the fiscal year 1905-6.

The correspondence of the department, as well as the monthly reports from the medical officers, indicate that the general health conditions amongst the different bands throughout Canada have been much the same as last year. There have been, however, several outbreaks of contagious disease calling for special action, and causing in one instance a very serious mortality. The extent over which the health supervision, like that of the general supervision, of the 109,000 Indians in the Dominion has been maintained may be roughly judged from the following table:—

Total Indian population (in treaty).....	88,680
“ “ (outside treaty).....	20,714
Total Indian agents.....	93
Total medical officers.....	186

	Ontario.	Quebec.	Nova Scotia.	New Brunswick	Prince Edward Island.	Manitoba, Alberta, Saskatchewan and N.W.T.	British Columbia.
Population	23,728	11,307	2,148	1,732	284	24,484	24,997
Total bands	57	17	18	14	2	109	158
Total agents	23	14	17	2	1	26	10
Total medical officers	28	14	29	22	9	49	35
Area in square miles.....	228,000	347,350	20,600	28,200	2,000	550,956	383,300

When it is understood that these 375 bands are spread over the enormous area indicated, and that their numbers average only 287 of a population per band, it will be

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seen that from the very principle which underlay the distribution of the bands in the more remote and unsettled parts of this immense area, the distance of the tribes from the centres where physicians locate makes the problem of regular and frequent medical attendance a difficult one. The tendency which long ago was shown for these children of nature to imitate the vices rather than the virtues of the white man, has proved the wisdom of placing the reserves distant from settlement, even from the standpoint of health, and evidence is at hand that those bands which have remained roving bands of hunters and trappers have been, generally speaking, more free from disease than have been those who have adopted the settled manner of life on reservations, especially during the earlier years after they have begun to live in permanent habitations.

The explanation is natural and obvious from the medical standpoint. As armies remain relatively immune from disease while frequently moving camp, and have almost invariably suffered from cholera, enteric or other filth diseases, when in permanent camps where the water-supplies become polluted and organic filth accumulates, so has it been with the nomadic Indian to whom sanitation has hitherto been wholly unknown. When, however, to the dangers which ordinary organic filth creates in the shape of the acute contagious diseases already indicated, we have instituted conditions such as must necessarily result from the small houses which the Indians have been supplied with, and then allow some contagious disease to be introduced, whose progress like that of tuberculosis is slow, yet whose germ has a vitality and persistency unequalled by any other, it must be apparent that the infection will soon become generally disseminated and, like any acute disease, will tend to spread through a band until all have become infected or have developed an immunity or have died. The history of the most recent British and United States wars, in which enteric fever in the permanent camps of Bloomfontein and Chatanooga had 20,000 cases each in armies of some 60,000 men, illustrated the old story of what had been looked upon as inevitable; but scarcely had the memory of these plagues begun to fade, when the Russo-Japanese war occurred, and the world saw more than 1,000,000 Japanese soldiers eighteen months in the field without a single epidemic of enteric being chronicled. It is apparent then, from what is observed in war and yet more, what is daily and increasingly being observed in the cities and towns of Canada with their systems of water-supply and sewers, that sanitation can practically remove enteric from the causes of mortality, while it is daily becoming apparent everywhere that tuberculosis, the bane of bad house sanitation, can be largely eliminated by correct methods from the homes of our Indian population. It has decreased notably in dense populations, as in England from 2.5 to 1.5 deaths per 1,000 through improved sanitation, while the Tenement House Commission of New York has by its active work lowered the deaths in large areas from tubercular disease, the death-rate falling from 21.0 to 18.0 per 1,000 from all causes.

With these facts to guide us, it becomes necessary to examine the situation as we find it with regard to the health of the Indian bands. In the partial returns received during the past year from some 99 medical officers, representing a population of some 70,000, we find that out of a total of 23,109 reported, there were 3,167 cases of disease registered as tubercular.

A close examination of the table will show that, as last year, the Indian is in a remarkable degree free from many of the diseases especially affecting modern society, such, for instance, as kidney and nervous diseases. Rheumatism and diseases of the digestive system are alone those which prevail largely, in addition to pulmonary diseases, and these are the cause of but a small proportion of deaths anywhere.

And yet, when we turn to the total deaths, which so far as the mortality rates are obtainable, the totals as a whole are so great and in some bands so enormous that nothing less than the epidemic prevalence of some disease will account for such mortality. The following table giving the total deaths for the different provinces at once shows that the greatest mortality is in the bands of the Northwest and British Columbia, excepting, perhaps, those in the maritime provinces.

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TABLE showing Population, Births and Deaths, with Death-rates per 1,000, by Provinces.

Province.	Agencies.	Popula- tion.	Births.	Deaths.	Death rate per 1,000.
Ontario.....	32	23,728	603	539	22·7
Quebec.....	16	11,307	304	240	21·2
Nova Scotia.....	18	2,148	94	66	30·2
New Brunswick.....	14	1,732	81	68	39·2
Prince Edward Island.....	2	284	8	12	42·2
Manitoba, Alberta, Saskatchewan and Territories.....	21	24,484	869	810	33·0
British Columbia.....	7	24,997	552	594	23·7
Total.....	110	88,680	2,511	2,329	26·2

What so greatly surprises one when the location of these bands, distant from other influences which tend toward demoralization and degeneration, and in a district famous, and properly so, as a health resort for the white consumptive, is considered, is that the presence of tuberculosis can be even possible. And what one wonders even more at is that the greatest mortality should be in several bands where seemingly they are located so that the medical service is more available than at other less favoured points.

Thus the rate per 1,000 in the two Blackfoot bands, located on the Alberta plains, 3,000 feet above the sea, is 81·8 per 1,000, while in a note it is stated that 17 out of a total of 29 deaths in Running Rabbit band were due to tuberculosis.

Similarly in the splendid Edmonton country 86·4 per 1,000, or 60 deaths occurred in 5 bands with a total population of 694. To show that it is peculiar to the band, in other words localized infection in both cases, we have only to go west of the Rockies to the bands of the Kootenay agency, where in a population of 611, included in 6 bands, the death-rate is but 14·7 per 1,000. This too is foot-hill country, with an elevation approximating 3,000 feet. Again, one can come to the plains of Manitoba and find the same marked differences. The Portage la Prairie agency has a death-rate of 60·8 in 4 bands of 411 population, and the Sioux band of 121 members has a mortality of 82·6 in the 1,000.

As if, however, to offset the Kootenay agency, the agencies in British Columbia at the coast, and even in the famed dry bench-lands of the Okanagan, have a high mortality. The Kamloops band has 38·6 per 1,000, the Fraser River agency bands, numbering 2,817, a death-rate of 39·4 per 1,000, and the Kwawkewth agency of 15 bands, with a population of 1,267, shows a rate of 77·6 in 1,000.

Coming eastward to Ontario, the same enormous differences in the death-rates of different bands are seen. The same law would seem to tend to prevail as in the west, viz.: that bands which, once munters and trappers, have within recent years settled on reservations show the highest death-rates, they being the least learned in the methods of housekeeping required under such conditions. Thus the Ojibeways of the Kenora agency (984) have a death-rate of 46·3, and those of the Port Arthur agency, of 1,521 souls, a rate of 55·2, 5 bands each showing a decrease, and but one an increase. On the other hand, the Indians of the Georgian Bay agency, 864 in all, have a death-rate of 21·9 per 1,000, and only one band shows a decrease of 1. The Chippewas of the Lake Huron and St. Clair district still show the same high mortality, changing, however, in the different bands.

Bands.	Death rate per 1,000.	
	1904-5.	1905-6.
Thus,—Chippewas of Walpole Island, numbering 596.....	38·6	26·9
“ Sarnia, numbering 471.....	52·0	33·7
“ Saugeen “ 396.....	15·1	27·7
“ Nawash “ 389.....	23·5	10·2

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Other bands now well established as agriculturists, with houses fairly well constructed and kept, show that they have advanced to such a status as regards health matters that they employ largely their own physicians and exercise their preferences as do the people of neighbouring communities.

Bands.	Popula- tion.	Death rate per 1,000.	Popula- tion.	Death rate per 1,000.
		1904-5.		1905-6.
Mohawks of Bay of Quinte	1,297	6.9	1,320	8.3
Six Nation Indians	4,267	18.9	4,315	24.1
Mississaguas of Alnwick	233	10.9	240	12.5

Other bands, as the Pottawattamies of Walpole island, and the Oneidas and Munsees of the Thames, seem to hold a midway position in the matter of mortality rates, and continue to suffer abnormally from tuberculosis, as do other bands.

Extending the survey to Quebec, the pleasing fact noted in last year's report can be repeated, that the mortality rate of the bands of this province is the lowest of all, being 21.2 as compared with 22.2 per 1,000 last year. As in Ontario and the west, there are, however, bands with abnormally high death-rates. Thus:—

Bands.	Population.	Death-rate per 1,000.
Micmacs of Restigouche	496	46.9
Abenakis of St. Francis	336	35.7
St. Regis Indians	1,431	34.8
Montagnais of Lake St. John	551	34.4
Timiskaming Band	229	34.9

The bands of New Brunswick and Nova Scotia are in most cases too small in number to give an accurate idea from a single year's statistics; but a total mortality of 39.2 per 1,000 in a population of 1,637 in New Brunswick and of 37.2 in Nova Scotia with Prince Edward Island, sufficiently indicate how high the general mortality is. Nevertheless, there are bands which show a notably less number of deaths than the average.

But it is unnecessary further to illustrate several facts which stand out with great clearness when the tables are studied carefully. These may be summed up as follows:—

1. That the Indian population of Canada has a mortality rate of more than double that of the whole population, and in some provinces more than three times.

2. That this mortality is notably increased by unfavourable climatic conditions, as seen in the high death-rates in the bands located on the sea shores of the maritime provinces and of British Columbia, while certain tribes seem in some degree more subject to disease than are others.

3. That, allowing for climate, the broad fact stands clearly forth, other things being equal, that those bands which, as in the Northwest, have most recently given up the old nomadic life and now live in small houses on reservations, even in most favoured climates and have learned least of the arts of domestic life, have the highest mortality.

4. That the one dominating cause of the excessive mortality everywhere is this lack of sanitary knowledge or of how to live in houses, and that the death-rate is due to the same cause, tuberculosis, which has operated with the same fatal effect amongst all people living in the same stage of civilization when once introduced among them.

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5. That the prevalence of tuberculosis amongst the bands is not due to insufficient food, though doubtless poorly preserved and badly cooked food may tend to lessen individual resistance; but it is due directly to infection introduced by one member of a family into a small, often crowded, house, and there, as dried sputum collects on filthy floors and walls, is spread from one to another so certainly and at times so rapidly that one consumptive has in a single winter infected all the members of a household as certainly and as rapidly as if he had had small-pox.

6. That from such houses infected children have been received into schools, notably the boarding and industrial schools, and in the school-room, but especially in the dormitories, frequently over-crowded and ill-ventilated, have been the agents of direct infection.

7. That children infected in the schools have been sent home when too ill to remain at school, or because of being a danger to the other scholars, and have conveyed the disease to houses previously free.

8. That owing to the simple habits of the Indian, common to all people at their stage, visiting from house to house is a chief feature of the day's occupation, and the sick are visited or go avisting, and through their expectorations serve to steadily spread the infection.

9. That bands that have shown a relative freedom from consumption continue year after year to have a low death-rate, and are invariably found either (a) not to have been permanently located so that they have been so exposed to infection, or (b) they are bands which have gone through the experiences attached to passing from nomadic to settled habits of life and through an advance in general intelligence of how to live, through the invaluable admixture of white blood, with its inherited qualities and with the further ability, owing to the band's being located in old-settled districts, to utilize a physician's services and follow his precepts.

Accepting these conclusions as correct statements of facts, one would naturally be inclined to examine first the treatment of infected Indians in their houses, as is the case with the general population of the community.

(a) 'Home' treatment of the consumptive has till recent years been almost general, while its general failure has been the despair of every physician. But under the home conditions in the ordinary Indian house as already illustrated, treatment, from the standpoint of curing the patient is in practice impossible, while the likelihood of preventing the spread of infection is almost equally remote. But even if the home treatment could be made under the ordinary situation of the medical officer, either as regards the terms of his appointment or the possibility of frequent visits to his patients, the distance would prevent its being followed with advantage without some important nursing adjunct.

(b) If then the home treatment, so generally found useless, whether with the white or the Indian population, is not advisable, we turn naturally to treatment away from home in some hospital or sanatorium. Clearly this method, assuming such institutions existed, would do two things: 1st, remove an infective danger from the household, and 2nd, place it where it would have the same good chance of recovery in the early stages of tuberculosis as other cases have.

(c) Comprehending, however, that anything like a general introduction of sanatoria would demand a very large expenditure of funds since, if we assume that even 1 in 4 of the total deaths is due to tuberculosis, it means at least 3 or 4 times as many more sick at the same time, we naturally turn to the third possibility, that of the construction at the most central points for several bands of a simple 'Home,'—in many cases large double-walled tents, strengthened with a frame when necessary, with proper floors, stoves, and such other requisites, as that several patients could be housed there comfortably and yet supplied with food from the band's funds or rations.

(d) But, however practical and economical this suggestion may be as supplying a way of dealing with tubercular cases locally, it raises the yet more crucial problem of how the supervision of such is to be effected. From what has already been said, it is

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manifest that we cannot at present take an ordinary housekeeper from the band as a nurse, and expect that intelligent control and careful attention essential to success would follow. But nurses from such, it is trusted, would be gradually educated; and the instruction in house sanitation obtained while under training will be, as has been shown to be the case in all similar institutions, the first step towards home education.

Under whose charge then must such 'Homes' be placed? At present there exists an organization, 'The Victorian Order of Nurses,' especially designated for taking up nursing work, whether in the slums of cities or in the out-of-the-way places on the prairies or in the forests. Further, they have centres in every province from which to draw; but whether from this order or not, our aim must be to make such 'Homes' sanatoria schools for training young Indian women as nurses and housekeepers.

(e) Should such a scheme be inaugurated, it must manifestly be but a complement to the equally, and still more important work, of district visiting. If in all the great cities of England, where the people have had a thousand years of Christianity to teach them how to live, district lady sanitary officers are a part of the necessary equipment of every executive health office, it scarcely needs any argument to prove that such an officer is absolutely essential to the good health of every Indian band as such exist to-day. It is hardly necessary to add that, if such be appointed, the work, its direction and control would necessarily be under the close supervision of the Chief Medical Officer. It would mean that reports as frequent as once a month, stating the exact health conditions of the band would be required, and that monthly accounts of the 'Home,' which would be the residence of the 'Nurse,' would be required to be sent to the department for strict supervision and control. It need hardly be said that self-denial would be the lot of any nurse who might undertake such work. She would be isolated from her friends, her companions would be consumptive sick, her recreation and exercise would be the visiting of often unsanitary houses, and teaching a taciturn and unresponsive, even if often honest and affectionate, people. Our churches call, and not in vain, for young women to go to India, China and the remote islands of the sea, to become evangelists for Heaven. Surely for our own people, whose lands we occupy, who are our 'wards' and whom we have solemnly engaged to protect, we can find workers to go into this field, where surely there is a harvest to be reaped, *pro amore patriae*, as well as with that older motto *ad maiorem Dei gloriam*, of the earlier apostles.

(f) But having ventured on the outline of the above scheme as being in the light of the scientific method, as well as of our experience in the past, one which is an attempt to deal with disease in the individual in his very home, that is, to deal at once with the effect and the cause, we must endeavour to examine what, if any, machinery is already in existence which may help us. For many years there have been Indian agents, in some cases living on the reserve, in most cases at distances often great therefrom, since there are often several bands in an agency. Again, there are in a very considerable number of reserves, boarding schools with teachers residing there. There is further, in some instances, a farm instructor residing on the reserve. Some of these schools have a resident staff appointed and paid by the government, while others have a staff appointed by some church organization. In addition, there are some 189 medical officers, in a very few instances residing on the reserve and devoting all their time to the several bands of the agency. Besides these there are several hospitals, in one or two instances managed by a government physician, and which in a few instances have been erected near some industrial or boarding school.

In addition to these, there are, notably in the wide areas of sparse settlements of British Columbia, hospitals established by the provincial government for the people generally, where there is a physician permanently in charge. In the Babine agency, the Port Simpson agency, &c., these hospitals receive regular grants from the department for treatment therein of Indians. The same is true of a very few in Manitoba, Saskatchewan and Alberta; but for the most part any hospital aid is merely for the payment given in special cases to the hospital nearest the reserve.

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To locate the 'Home' near some school, whether industrial or boarding school, would, so far as location goes, be likely to be found advantageous, since the boarding school is commonly near some reserve of an agency. Indeed, the germ of the nursing idea has already existed for several years in the Brandon district, where two nurses have been attached to the schools of the agency.

Wherever, then, there is a hospital on a reserve, would seem to be the centre from which the 'Nurse' or sanitary worker would radiate, provided that there be supplied the 'Home' of some sort in which the nurse will receive the tuberculized sick. It is further natural to inquire whether the very work which such a 'Nurse' or 'Sanitary Worker' would do, has not already been done or is not being done in many places now. If one were to judge from the mortality as a whole, he would say 'No.' But there are known individual instances, where in a school under religious auspices 'Sisters' or teachers do visit the houses of the band, and where the results of such self-sacrificing work are proportionately evident.

MEDICAL WORK DONE.

The medical officers, numbering in all some 189, 132 being paid a salary and 57 fees, have their duties defined in the terms of their appointment, whether as giving all their time to the service, as making monthly or quarterly round visit to the reserves of an agency, with special visits in emergencies, going when called upon by the agent, or as accompanying an inspector on his half-yearly visits to the treaty Indians of the far north. Of these, 49 sent complete monthly or quarterly reports, 47 sent occasional reports and 87 have forwarded none. The number of the population reported upon is as follows:—

Complete reports on some.....	27,000	Indians.
Partial reports on some.....	40,000	"
Not reported on.....	41,000	"

TABLE OF DISEASES, 1905-6.

GENERAL DISEASES.	MONTHS.												Total.
	1905.						1906.						
	July.	August.	September.	October.	November.	December.	January.	February.	March.	April.	May.	June.	
I.—Communicable (epidemic) diseases—													
1. Typhoid fever.....	0	0	1	0	0	1	0	0	0	3	0	0	8
2. Small-pox.....	0	13	7	3	0	0	0	0	5	5	3	0	36
3. Measles.....	10	8	13	6	9	12	14	13	14	11	0	0	110
4. Scarlet fever.....	0	0	0	0	0	5	5	4	0	2	0	1	17
5. Whooping-cough.....	0	15	11	3	0	7	6	10	12	10	8	6	89
6. Diphtheria and croup.....	0	3	5	3	1	4	13	11	13	15	9	8	85
7. Influenza.....	9	17	21	25	4	7	14	15	20	24	15	15	186
8. Other epidemic diseases.....	3	0	20	3	1	6	19	20	14	14	21	17	120
II.—Other general diseases—													
1. Pyaemia and septicemia.....	11	6	7	3	16	16	15	17	10	12	24	15	152
2. Malarial fever.....	28	46	66	34	15	14	0	0	0	0	24	18	243
3. Tuberculosis and scrofula.....	T 122	139	134	175	148	150	182	165	180	176	181	181	1,933
	S 1	79	81	84	116	90	104	111	107	117	118	114	1,234
4. Syphilis.....	14	18	30	18	22	22	29	24	25	29	28	24	283
5. Cancer.....	1	4	6	2	1	4	4	2	3	3	0	2	32
6. Rheumatism and gout.....	183	150	115	173	167	163	151	142	168	186	185	143	1,926
7. Diabetes.....	0	0	2	0	1	0	1	0	2	5	5	0	16
8. Other general diseases.....	80	97	95	64	71	86	70	64	63	77	69	55	888
9. Alcoholism, acute and chronic.....	1	4	3	4	3	5	9	3	6	5	5	4	52

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TABLE OF DISEASES, 1905-6—*Continued.*

MONTHS.														Total.
GENERAL DISEASES.	1905.						1906.							
	July.	August.	September.	October.	November.	December.	January.	February.	March.	April.	May.	June.		
LOCAL DISEASES.														
III.—Diseases of nervous system and organs of sense—														
1. Encephalitis.....	0	1	0	0	0	0	0	0	0	0	0	0	1	
2. Simple meningitis.....	0	0	0	0	1	1	0	2	4	4	3	0	15	
3. Epidemic cerebro-spinal meningitis.	0	0	0	0	0	0	0	0	0	0	0	0	0	
4. Congestion and hemorrhage of the brain.....	0	0	0	0	0	0	0	0	1	1	1	0	3	
5. Softening of the brain.....	0	0	0	0	1	0	0	0	1	3	0	0	5	
6. Paralysis without specified cause.....	0	2	0	0	0	0	0	1	3	2	0	0	8	
7. Insanity.....	1	0	4	3	1	4	4	2	4	4	3	3	33	
8. Epilepsy.....	6	7	3	2	3	5	3	4	1	4	4	10	52	
9. Convulsions (not puerperal).....	1	3	2	3	4	6	5	5	5	8	5	2	49	
10. Toothache.....	63	79	92	101	111	104	110	105	106	101	87	86	1,145	
11. Other nervous diseases.....	10	5	4	9	8	3	4	2	0	0	17	14	76	
IV.—Diseases of circulatory system—														
1. Pericarditis.....	1	0	0	0	2	1	0	3	4	5	7	6	29	
2. Endocarditis.....	0	0	10	0	2	2	0	0	0	2	3	2	21	
3. Organic heart diseases.....	113	90	105	106	115	120	106	91	87	80	76	80	1,169	
4. Angina pectoris.....	0	0	0	0	0	1	0	0	0	1	1	0	3	
5. Diseases of the arteries, atheroma aneurism, &c.....	1	5	0	0	1	0	6	1	6	11	5	2	38	
6. Other diseases of the circulatory system.....	5	12	7	8	22	19	7	11	6	5	10	0	112	
V.—Diseases of the respiratory system—														
1. Acute bronchitis.....	65	81	83	75	97	92	119	102	96	105	85	80	1,080	
2. Chronic bronchitis.....	46	49	54	55	70	69	84	76	71	74	55	55	758	
3. Broncho-pneumonia.....	13	4	2	5	19	25	36	24	31	18	22	11	210	
4. Pneumonia.....	14	7	10	5	23	23	24	18	44	62	44	33	307	
5. Pleurisy.....	16	3	11	10	36	35	31	25	29	16	17	31	251	
6. Congestion of the lungs (including pulmonary apoplexy).....	0	0	0	0	0	0	0	0	2	2	0	1	5	
7. Asthma and emphysema.....	0	0	0	0	0	0	0	0	0	0	4	1	5	
8. Other diseases of the respiratory system.....	11	4	8	3	8	7	6	5	11	11	8	3	85	
VI.—Diseases of the digestive system—														
1. Ulcer of the stomach.....	0	0	2	4	1	0	0	1	2	1	1	0	15	
2. Other diseases of the stomach (cancer excepted).....	148	140	150	128	140	136	129	113	113	99	93	100	1,489	
3. Infantile diarrhoea and gastroenteritis (cholera infantum).....	18	52	48	15	27	23	28	8	6	12	27	10	284	
4. Diarrhoea and enteritis (not infantile).....	93	33	43	43	44	36	25	19	13	12	23	20	404	
5. Dysentery.....	7	20	26	24	15	5	6	0	4	4	21	17	149	
6. Hernia and intestinal obstructions.....	1	5	4	6	9	11	9	11	9	9	6	5	85	
7. *Other diseases of the intestines....	196	190	196	155	133	88	91	93	95	117	125	126	1,605	
8. Diseases of the liver.....	7	5	10	2	7	4	7	2	4	7	5	0	60	
9. Peritonitis (not puerperal).....	0	0	2	2	1	0	0	2	1	3	8	8	27	
10. Iliac abscess (typhlitis, perityphlitis, appendicitis).....	0	1	2	2	1	2	2	1	0	1	1	1	14	

Mainly constipation.

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TABLE OF DISEASES, 1005-6—*Continued.*

MONTHS.														Total.
GENERAL DISEASES.	1905.						1906.							
	July.	August.	September.	October.	November.	December.	January.	February.	March.	April.	May.	June.		
VII.—Diseases of the genito-urinary system—														
1. Acute nephritis.....	0	2	5	0	1	3	0	4	2	0	1	3	21	
2. Bright's disease.....	5	6	21	15	12	11	6	6	4	6	8	7	107	
3. Other diseases of the kidneys and adnexa.....	7	3	6	4	5	4	2	0	1	3	4	0	39	
4. Vesical calculi.....	0	0	0	0	0	0	0	0	0	0	0	0	0	
5. Diseases of the bladder.....	11	5	15	11	6	9	9	7	4	5	4	4	90	
6. Diseases of the male genital organs.....	20	12	36	20	5	25	25	23	28	21	26	22	263	
7. Metritis.....	10	8	42	26	31	28	23	25	23	20	22	22	280	
8. Other diseases of the uterus.....	3	5	10	4	12	17	13	12	15	6	12	13	122	
9. Ovarian cysts and other ovarian tumours.....	8	11	34	19	14	13	23	29	30	32	36	27	270	
10. Other diseases of the female genital organs.....	11	18	26	18	28	28	18	19	27	28	21	21	263	
VIII.—Puerperal diseases—														
1. Puerperal septicemia.....	0	8	18	22	21	20	21	25	17	17	17	16	202	
2. Puerperal albuminuria and convulsions.....	0	0	0	2	0	0	0	1	3	3	1	1	11	
3. Other accidents of pregnancy sudden death.....	0	2	0	1	2	4	3	1	3	2	2	3	23	
4. Puerperal diseases of the breast.....	1	0	0	6	8	0	0	0	6	6	10	9	46	
5. Other puerperal.....	47	34	43	52	63	56	56	56	55	51	44	37	594	
IX.—Diseases of the skin and cellular tissue—														
1. Erysipelas.....	9	6	6	11	4	4	3	2	4	7	16	28	100	
2. Other diseases of the skin and its adnexa (cancer excepted).....	0	17	9	21	15	12	18	17	17	15	12	8	156	
3. Eczema.....	56	47	48	54	61	47	49	53	50	69	55	67	656	
XI.—Malformations, diseases of infancy, diseases of old age—														
1. Still-births.....	0	1	0	1	0	0	1	0	4	5	6	2	19	
2. Congenital debility and malformations.....	1	0	0	1	4	0	0	0	0	5	3	1	15	
3. Other diseases of infancy.....	10	12	34	36	19	24	16	17	28	22	16	15	249	
4. Senile decay.....	2	1	4	4	4	5	2	5	5	3	3	0	38	
‡ Injury.....	65	40	58	74	78	61	68	57	72	71	66	68	787	
XIII.—Accident—														
1. Fractures and dislocations.....	1	1	2	0	3	11	22	13	13	12	9	8	94	
2. Gunshot.....	5	3	7	18	20	21	21	20	24	16	12	14	181	
3. Lightning.....	0	0	0	0	0	0	0	0	0	0	1	0	1	
4. Drowning.....	3	3	1	11	5	5	11	7	4	4	9	4	72	
5. Burns and scalds.....	6	7	5	17	4	4	13	10	10	8	13	12	109	
6. Other accidents.....	4	2	3	9	10	3	7	15	13	10	5	9	90	
XIV.—Ill-defined causes—														
1. Dropsy.....	4	0	1	7	4	1	3	1	2	3	6	9	41	
2. Tumours.....	5	2	4	4	9	3	5	4	7	5	3	4	55	
3. Other ill-defined causes.....	59	15	31	30	20	20	17	23	35	26	31	20	327	
XV.—Eyes—														
1. Corneal ulcer.....	9	21	32	17	18	21	24	24	22	18	16	10	242	
2. Conjunctivitis.....	37	53	50	46	41	39	42	37	34	37	30	37	486	
3. Pterygium.....	30	49	53	40	35	32	30	27	21	19	14	8	358	
Total.....													23,409	

‡ Included in 'Injury' class.

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In class I are given the acute epidemic diseases, from which it appears small-pox of a mild character appeared in several bands in different provinces; in all, 36 cases occurred. Measles likewise prevailed in 110 cases reported; but a special report on an outbreak in the Clandeboye agency, Lake Winnipeg, indicates that 150 cases of measles, either alone or combined with scarlet fever, occurred. Diphtheria and whooping-cough are reported in small numbers, while influenza or grippe, as usual, has quite a number of cases placed under it. There does not seem to have been any great mortality attached to any of these diseases, except in outbreaks on the Lake Winnipeg reserves. The result, some 25 deaths in a band of 484, illustrates a difficulty which exists, but which might have been met more effectively had the outbreak been promptly reported by the agent and action as promptly taken by the medical officer.

Of the general diseases under class II, but two show a high prevalence, viz., rheumatism and gout, and tuberculosis, which includes scrofula. In all 3,167 cases of the latter are reported, but doubtless a good number are repeated from month to month. The mortality due to this disease has not been given, but its extent as the main cause of excessive mortality in the several bands has already been referred to. Cancer and alcoholism are noted as present only to a small extent. Indeed the immunity of the Indians from cancer is seemingly worthy of remark.

Of the nervous diseases in class III, excepting toothache, with 1,145 cases, there are 52 of epilepsy and 49 of convulsions, but insanity is not frequent, there being but 33 cases reported.

Class IV has a notable number of cases of organic heart disease; such cases are liable, however, to be reported in successive monthly returns.

Class V, giving diseases of the respiratory system, has the principal included under bronchitis, acute or chronic. The relatively few cases of pneumonia, remembering the prevalence of tuberculosis, is quite remarkable, and would seem to indicate a tendency on the part of the physicians to place pneumonia, so commonly associated with tuberculosis, under that heading. Class VI shows under the general headings, diseases of the stomach and of the intestines, the greatest number of cases. Dyspepsia, indigestion, biliousness, constipation and the several other terms generally applied to disturbances of the digestive organs, are included under this heading.

The large number who at treaty payment, on the medical officer's monthly or quarterly visit, demand attention for some minor ailment, real or imaginary, swells this number notably. The practice, as illustrated by different medical officers, is dependent on the free medicine given, and indicates the need for teaching the Indian as others, that medicine is much more effective when paid for.

Class VII. The diseases of this class are found to be relatively few in number, there being but few kidney or bladder diseases, while diseases of the genital organs, male or female, are not numerous. The same remark may be made regarding diseases under class VIII, although puerperal septicaemia is not uncommon. Class IX, with the succeeding classes, shows no prevalence of any particular disease; but an interesting fact may be noted in the relatively large number of drowning accidents. It is worthy of remark that amongst Indians, as amongst river-drivers and sailors, there should be so many persons constantly engaged in occupations on water who have never learned to swim. A special class XV, has been added, giving diseases of the eyes. These diseases, as in boarding schools everywhere, tend to spread rapidly as epidemic ophthalmia, notably conjunctivitis. Use of the same towel, basin, and personal contact are the usual cases, while with the Indians in their teepees the smoke sets up an irritation frequently resulting in inflammatory troubles. The severity of these as they become chronic trachoma, is seen in the number, 242, of corneal ulcers reported. Pterygium is frequent, while special hospital reports indicate that cataracts occur from time to time and are there operated upon.

Reference has already been incidentally made to the utilizing of a few hospitals subsidized by the government, erected either in or near some reserve and maintained by some church organization or, as in British Columbia, established by the provincial

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government. These are, in a number of instances, practically devoted to Indian patients. In addition, a very considerable number of the more severe and especially of surgical cases are sent to some general hospital near a reserve, and in this way some of the best work is done. On the other hand, examination of the record cases shows an abuse, as where charges are made for cases going to hospital for some minor ailment.

There has been, in addition to the use of existing hospitals, a start made during the year in the direction of temporary cheap tent-hospitals. There has been a small tent-hospital erected at the industrial school at Calgary in which affected pupils may be placed, as when suffering from tubercular glands requiring treatment.

Two hospital tents have been in operation during the past summer at the Touchwood agency, where tuberculosis of a scrofulous type especially prevailed, and a number of radical operations were performed. Similarly in the Birtle agency a tent hospital has been arranged for, with a view to the isolation and radical treatment of the numerous tubercular cases, especially in the Waywayseecappo band. The hospital at Morley, on the Stony reserve, has been put in operation during the year, while some advance has been made in the matter of utilizing buildings now in the hands of the department at the Calgary industrial school as a sanatorium for tubercular pupils from the surrounding reserves, while continuing them at partial school work, when possible.

Thus we have a beginning made along the line of action indicated in the earlier part of the report as being apparently the best practical means of both dealing with contagious tubercular disease where it exists, and of preventing its further increase. Experience everywhere has shown how effective such a simple system of dealing with tubercular patients may be made, while the maximum results have been everywhere associated with the minimum of cost.

MEDICAL INSPECTION OF SCHOOLS.

The monthly reports of the physicians attending upon the school children very frequently refer to the presence of cases of tubercular disease in its infectious stage, and do not fail equally often to refer to the unsanitary condition of the school buildings, erected, in many instances, years ago by some devoted missionary, from the standpoint more often of proximity to the band than of regard for a sanitary location, with inadequate ideas as to the necessity for sunlight, ventilation and fresh air, and often with the crudest ideas of maintaining the water-supply and disposing properly of sewage. Such buildings are demanding, in view of their having been contaminated with the germ of tuberculosis, resulting in an unusual number of cases of scrofula in the pupils, a systematic and thorough overhauling, in order that they may be brought into keeping with modern ideas. This done, the department may then discuss at what points expenditures are most urgently needed, and where they will be most productive of results.

VACCINATION OF THE BANDS.

During the year a circular letter has been sent out by the department, with a view of finding out how thoroughly the routine vaccination of the bands is being carried out. The following table gives a summarized statement of the replies received to date:—

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PRESENT STATE OF INDIANS AS REGARDS VACCINATION.

Bands.	Number Vaccinated.	Remarks.
<i>Ontario.</i>		
Oneida Band.....	75 (in 1899)	All vaccinated in 1897.
Munsee Band.....		" 1899.
Chippewa Band.....		" 1899.
Alnwick Band.....		None vaccinated recently.
Mississaguas of Scugog.....	35 (in 1901)	All vaccinated five years ago.
Moravians of the Thames.....		All over three years available vaccinated.
Chippewas of Sarnia.....		All vaccinated but a few infants.
Rama Band.....		" in 1901; some twenty-eight children not.
Six Nations.....		House to house vaccination made last autumn and spring.
Walpole Island Bands.....		All vaccinated in 1903 during an epidemic then.
Georgina Island Band.....		Vaccinated in 1901; some children, born since, not.
Kenora Band.....		All vaccinated as met with.
Sturgeon Falls Agency.....	10	Only ten vaccinated in agency.
Golden Lake Band.....	60	Only sixty vaccinated in band.
<i>Quebec.</i>		
Seven Islands & Mingan Bands.....	56	Others not.
St. Regis Band.....	1,181	Balance of 250 not.
Maniwaki Band.....	258	" not.
Hurons of Lorette.....	193	" of 268 not.
<i>Maritime Provinces.</i>		
Shelburne River Band.....	7	Vaccinated fifteen years ago.
Clyde Band.....	4	" "
Bannington Band.....	2	" "
Sable River Band.....	13	" "
Micmacs of Shubenacadie.....		None vaccinated.
Micmacs of King's County.....		" for several years.
Eel River Band.....		" vaccinated.
Bathurst Band.....		" within six years.
Burnt Church Band.....		" "
Red Bank Band.....		" "
Big Cove Band.....		" vaccinated.
Indian Island Band.....		" "
Buctouche Band.....		" "
Ft. Folly Band.....		" "
N. B. (Western Division).....	17 (in '05-'06)	Some 210 others during the past twenty years.
N. B. (Northern ").....	14 (in 1903)	" " "
N. B. (Northeastern Division).....		None vaccinated recently.
P. E. I. Micmacs.....		Not known when any were vaccinated of the 284 on island.
<i>Manitoba, Alberta and Saskatchewan.</i>		
Muscowequan Band.....	110 (in 1901)	Remainder not.
Gordon's Band.....	156 (")	" "
Day Star's Band.....	56 (")	" "
Poorman's Band.....	71 (")	" "
Blackfoot Agency.....		Any born since 1904 have not yet been vaccinated.
Edmonton Agency.....	509	A general vaccination is stated to have occurred in 1905-6.
Blood Agency.....	641	Vaccinated part in 1903 and rest in 1904-5, others not.
Portage la Prairie and Manitoba Agencies.....	1,720	All vaccinated within past two years.
Hobbema Agency.....	200	Vaccinated five years ago; none since.
Moose Mountain Agency.....	110	Balance (80) not.
Pelly Agency.....		None since 1905; vaccinated at annuity payments.
St. Frances Agency.....		No particulars. Vaccination every six or seven years.
Assiniboine Agency.....	203	Vaccinated two years ago; none since.
Stony Reserve.....	350	In 1903 at treaty and again others in April, 1906.
<i>British Columbia.</i>		
Kwakwewlth Agency.....		No particulars obtainable yet.
Kamloops-Okanagan Agency.....		None within four years; probably some 300 adults and young children unvaccinated.
Kootenay Agency.....	830	Thirty-four of these during 1906; others since 1899.
Cassiar District.....		None have ever yet been vaccinated; recent appointment of medical officer here.
Fraser River Agency.....		Indians are opposed to vaccination. Practically none are vaccinated.

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From the above table it will be seen that the vaccination of the Indian bands during the small-pox years of 1899, 1900 and 1901 was fairly complete, but there is evidence that with the passing away of the epidemic no general vaccination has been done since save in very few instances, while it is only in a few of the bands that the systematic vaccination of the children is carried out. The difficulty with regard to vaccination is similar to that often found in municipalities where no cases of small-pox exist. It is, however, here, as elsewhere, observed that the medical officer who gives most careful attention to his work is usually the one who sees that the Indian children are vaccinated from year to year. Thus in the Six Nations, the statement is made: 'House to house vaccination of all children was made last autumn and spring.' Of the Stony reserve, the medical officer stated: 'All were vaccinated at time of treaty payments in 1903, and 350 were again vaccinated this spring; the whole reserve is now thoroughly vaccinated.' It will thus appear that there really is no serious difficulty where vaccination has once been instituted, in maintaining thorough vaccination through the vaccination of the infants born each year. It is natural that there should be an objection among adults, after neglect to vaccinate for several years has occurred, should the medical officer propose in the absence of an epidemic, wholesale vaccination: but it is quite easy to educate the band to have the children vaccinated, there being but few in any year. The medical officers have been urged everywhere to complete the work of general vaccination, which is becoming all the more necessary, especially in New Ontario and the newer provinces of the Northwest, where many thousands of men are being aggregated along the extensive railway works now under construction. The immunity of the Indian bands from small-pox for many years has been directly due to the attention paid this universal duty.

Respectfully submitted,

P. H. BRYCE,

Chief Medical Officer.

JAMES BAY TREATY—TREATY No. 9.

OTTAWA, November 6, 1905.

The Honourable

The Supt. General of Indian Affairs,
Ottawa.

SIR.—Since the treaties known as the Robinson Treaties were signed in the autumn of the year 1850, no cession of the Indian title to lands lying within the defined limits of the province of Ontario had been obtained. By these treaties the Ojibway Indians gave up their right and title to a large tract of country lying between the height of land and lakes Huron and Superior. In 1873, by the Northwest Angle Treaty (Treaty No. 3), the Saulteaux Indians ceded a large tract east of Manitoba, part of which now falls within the boundaries of the province of Ontario. The first-mentioned treaty was made by the old province of Canada, the second by the Dominion.

Increasing settlement, activity in mining and railway construction in that large section of the province of Ontario north of the height of land and south of the Albany river rendered it advisable to extinguish the Indian title. The undersigned were, therefore, appointed by Order of His Excellency in Council on June 29, 1905, as commissioners to negotiate a treaty with the Indians inhabiting the unceded tract. This comprised about 90,000 square miles of the provincial lands drained by the Albany and Moose river systems.

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When the question first came to be discussed, it was seen that it would be difficult to separate the Indians who came from their hunting grounds on both sides of the Albany river to trade at the posts of the Hudson's Bay Company, and to treat only with that portion which came from the southern or Ontario side. As the cession of the Indian title in that portion of the Northwest Territories which lies to the north of the Albany river would have to be consummated at no very distant date, it was thought advisable to make the negotiations with Indians whose hunting grounds were in Ontario serve as the occasion for dealing upon the same terms with all the Indians trading at Albany river posts, and to add to the community of interest which for trade purposes exists amongst these Indians a like responsibility for treaty obligations. We were, therefore, given power by Order of His Excellency in Council of July 6, 1905, to admit to treaty any Indian whose hunting grounds cover portions of the Northwest Territories lying between the Albany river, the district of Keewatin and Hudson bay, and to set aside reserves in that territory.

In one essential particular the constitution of the commission to negotiate this treaty differed from that of others which undertook similar service in the past. One member* was nominated by the province of Ontario under the provisions of clause 6 of the Statute of Canada, 54-55 Vic., chap. V., which reads: 'That any future treaties with the Indians in respect of territory in Ontario to which they have not before the passing of the said Statutes surrendered their claim aforesaid shall be deemed to require the concurrence of the government of Ontario.' The concurrence of the government of Ontario carried with it the stipulation that one member of the commission should be nominated by and represent Ontario.

It is important also to note that under the provisions of clause 6 just quoted, the terms of the treaty were fixed by the governments of the Dominion and Ontario: the commissioners were empowered to offer certain conditions, but were not allowed to alter or add to them in the event of their not being acceptable to the Indians.

After the preliminary arrangements were completed, the commissioners left Ottawa for Dinorwic, the point of departure for Osnaburg, on June 30, and arrived there on July 2.

The party consisted of the undersigned, A. G. Meindl, Esq., M.D., who had been appointed to carry out the necessary work of medical relief and supervision, and James Parkinson and J. L. Vanasse, constables of the Dominion police force. At Dinorwic the party was met by T. C. Rae, Esq., chief trader of the Hudson's Bay Company, who had been detailed by the commissioner of the Hudson's Bay Company to travel with the party and make arrangements for transportation and maintenance en route. Mr. Rae had obtained a competent crew at Dinorwic to take the party to Osnaburg. The head man was James Swain, an old Albany river guide and mail-carrier, who is thoroughly familiar with the many difficult rapids of this river.

The party left Dinorwic on the morning of July 3, and after crossing a long portage of nine miles, first put the canoes into the water at Big Sandy lake. On July 5 we passed Frenchman's Head reservation, and James Bunting, councillor in charge of the band, volunteered the assistance of a dozen of his stalwart men to help us over the difficult Ishkaqua portage, which was of great assistance, as we were then carrying a great weight of supplies and baggage. On the evening of the 5th, the waters of Lac Seul were reached, and on the morning of the 6th the party arrived at Lac Seul post of the Hudson's Bay Company. Here the commission met with marked hospitality from Mr. J. D. McKenzie, in charge of the post, who rendered every assistance in his power. He interpreted whenever necessary, for which task he was eminently fitted by reason of his perfect knowledge of the Ojibway language.

The hunting grounds of the Indians who traded at this post had long ago been surrendered by Treaty No. 3, but it was thought advisable to call at this point to as-

* Mr. D. G. MacMartin.

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certain whether any non-treaty Indians had assembled there from points beyond Treaty No. 3, but adjacent to it. Only one family, from Albany river, was met with. The case was fully investigated and the family was afterwards attached to the new treaty.

The afternoon of the 6th was spent in a visit to the Lac Seul reserve in an attempt to discourage the dances and medicine feasts which were being held upon the reserve. The Indians of this band were well dressed, and for the most part seemed to live in a state of reasonable comfort. Their hunting grounds are productive.

The party left Lac Seul on the morning of July 7, en route for Osnaburg, passing through Lac Seul, and reached the height of land, via Root river, on July 10. Thence by the waters of Lake St. Joseph, Osnaburg was reached on the 11th.

This was the first point at which treaty was to be made, and we found the Indians assembled in force, very few being absent of all those who traded at the post. Those who were absent had been to the post for their usual supplies earlier in the summer, and had gone back to their own territory in the vicinity of Cat lake.

Owing to the water connection with Lac Seul, these Indians were familiar with the provisions of Treaty No. 3, and it was feared that more difficulty might be met with at that point than almost any other, on account of the terms which the commissioners were empowered to offer not being quite so favourable as those of the older treaty.

The annuity in Treaty No. 3 is \$5 per head, and only \$4 was to be offered in the present instance. The proposed treaty did not provide for an issue of implements, cattle, ammunition or seed-grain.

As there was, therefore, some uncertainty as to the result, the commissioners requested the Indians to select from their number a group of representative men to whom the treaty might be explained. Shortly after, those nominated presented themselves and the terms of the treaty were interpreted. They were then told that it was the desire of the commissioners that any point on which they required further explanations should be freely discussed, and any questions asked which they desired to have answered.

Missabay, the recognized chief of the band, then spoke, expressing the fears of the Indians that, if they signed the treaty, they would be compelled to reside upon the reserve to be set apart for them, and would be deprived of the fishing and hunting privileges which they now enjoy.

On being informed that their fears in regard to both these matters were groundless, as their present manner of making their livelihood would in no way be interfered with, the Indians talked the matter over among themselves, and then asked to be given till the following day to prepare their reply. This request was at once acceded to and the meeting adjourned.

The next morning the Indians signified their readiness to give their reply to the commissioners, and the meeting being again convened, the chief spoke, stating that full consideration had been given the request made to them to enter into treaty with His Majesty, and they were prepared to sign, as they believed that nothing but good was intended. The money they would receive would be of great benefit to them, and the Indians were all very thankful for the advantages they would receive from the treaty.

The other representatives having signified that they were of the same mind as Missabay, the treaty was then signed and witnessed with all due formality, and payment of the gratuity was at once proceeded with.

The election of chiefs also took place, the band being entitled to one chief and two councillors. The following were elected:—Missabay, John Skunk and George Wawaashkung.

After this, the feast which usually accompanies such formalities was given the Indians. Then followed the presentation of a flag, one of the provisions of the treaty; this was to be held by the chief for the time being as an emblem of his authority. Before the feast began, the flag was presented to Missabay, the newly elected chief, with

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words of advice suitable for the occasion. Missabay received it and made an eloquent speech, in which he extolled the manner in which the Indians had been treated by the government; advised the young men to listen well to what the white men had to say, and to follow their advice and not to exalt their own opinions above those of men who knew the world and had brought them such benefits. Missabay, who is blind, has great control over his band, and he is disposed to use his influence in the best interests of the Indians.

At Osnaburg the civilizing work of the Church Missionary Society was noticeable. A commodious church was one of the most conspicuous buildings at the post and the Indians held service in it every evening. This post was in charge of Mr. Jabez Williams, who rendered great service to the party by interpreting whenever necessary. He also gave up his residence for the use of the party.

On the morning of July 13 the question of the location of the reserves was gone fully into, and the Indians showed great acuteness in describing the location of the land they desired to have reserved for them. Their final choice is shown in the schedule of reserves which is annexed to this report.

We left Osnaburg on the morning of July 13, and entered the Albany river, which drains Lake St. Joseph, and, after passing many rapids and magnificent lake stretches of this fine river, we reached Fort Hope at 5 o'clock on the afternoon of the 18th. This important post of the Hudson's Bay Company is situated on the shore of Lake Eabamet, and is the meeting point of a large number of Indians, certainly 700, who have their hunting grounds on both sides of the Albany and as far as the headwaters of the Winisk river. The post was in charge of Mr. C. H. M. Gordon.

The same course of procedure was followed as at Osnaburg. The Indians were requested to select representatives to whom the business of the commission might be explained, and on the morning of the 19th the commissioners met a number of representative Indians in the Hudson's Bay Company's house. Here the commissioners had the benefit of the assistance of Rev. Father F. X. Fafard, of the Roman Catholic Mission at Albany, whose thorough knowledge of the Cree and Ojibeway tongues was of great assistance during the discussion.

A more general conversation in explanation of the terms of the treaty followed than had occurred at Osnaburg. Moonias, one of the most influential chiefs, asked a number of questions. He said that ever since he was able to earn anything, and that was from the time he was very young, he had never been given something for nothing; that he always had to pay for everything that he got, even if it was only a paper of pins. 'Now,' he said, 'you gentlemen come to us from the King offering to give us benefits for which we can make no return. How is this?' Father Fafard thereupon explained to him the nature of the treaty, and that by it the Indians were giving their faith and allegiance to the King, and for giving up their title to a large area of land of which they could make no use, they received benefits that served to balance anything that they were giving.

'Yesno,' who received his name from his imperfect knowledge of the English language, which consisted altogether in the use of the words 'yes' and 'no,' made an excited speech, in which he told the Indians that they were to receive cattle and implements, seed-grain and tools. Yesno had evidently travelled, and had gathered an erroneous and exaggerated idea of what the government was doing for Indians in other parts of the country, but, as the undersigned wished to guard carefully against any misconception or against making any promises which were not written in the treaty itself, it was explained that none of these issues were to be made, as the band could not hope to depend upon agriculture as a means of subsistence; that hunting and fishing, in which occupations they were not to be interfered with, should for very many years prove lucrative sources of revenue. The Indians were informed that by signing the treaty they pledged themselves not to interfere with white men who might come into the country surveying, prospecting, hunting, or in other occupations; that they

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must respect the laws of the land in every particular, and that their reserves were set apart for them in order that they might have a tract in which they could not be molested, and where no white man would have any claims without the consent of their tribe and of the government.

After this very full discussion, the treaty was signed, and payment was commenced. The payment was finished on the next day, and the Indian feast took place, at which the chiefs elected were Katchang, Yesno, Joe Goodwin, Benj. Ooskingisk, and George Quisees. The newly elected chiefs made short speeches, expressing their gladness at the conclusion of this treaty and their determination to be true to its terms and stipulations.

It is considered worthy of record to remark on the vigorous and manly qualities displayed by these Indians throughout the negotiations. Although undoubtedly at times they suffer from lack of food owing to the circumstances under which they live, yet they appeared contented, and enjoy a certain degree of comfort. Two active missions are established at Fort Hope, the Anglican, under the charge of Rev. Mr. Richards, who is resident, and the Roman Catholic, under the charge of Rev. Father Fafard, who visits from the mission at Albany.

Fort Hope was left on the morning of July 21, and after passing through Lake Eabamet the Albany was reached again, and after three days' travel we arrived at Marten Falls at 7.35 on the morning of Tuesday, July 25.

This is an unimportant post of the Hudson's Bay Company, in charge of Mr. Samuel Iserhoff. A number of Indians were awaiting the arrival of the commission. The first glance at the Indians served to convince that they were not equal in physical development to those at Osnaburg or Fort Hope, and the comparative poverty of their hunting grounds may account for this fact.

The necessary business at this post was transacted on the 25th. The treaty, after due explanation, was signed and the payment made immediately. Shortly before the feast the Indians elected their chief, Wm. Whitehead, and two councillors, Wm. Coaster and Long Tom Ostamas.

At the feast Chief Whitehead made an excellent speech, in which he described the benefits that would follow the treaty and his gratitude to the King and the government in extending a helping and protecting hand to the Indians.

The reserve was fixed at a point opposite the post and is described fully in the schedule of reserves.

The commodious Roman Catholic church situated on the high bank of the river overlooking the Hudson's Bay Company's buildings was the most conspicuous object at this post.

Marten Falls was left on the morning of Wednesday, July 26. Below this point the Albany flows toward James bay without any impediment of rapids or falls, but with a swift current, which is a considerable aid to canoe travel.

The mouth of Kenogami river was reached at 2.45 on the afternoon of July 27. This river flows in with a large volume of water and a strong current. It took two days of heavy paddling and difficult tracking to reach the English River post, which is situated about 60 miles from the mouth of the river and near the Forks. We found many of the Indians encamped along the river, and they followed us in their canoes to the post, where we arrived on the afternoon of July 29.

This is a desolate post of the Hudson's Bay Company, in charge of Mr. G. B. Cooper. There are very few Indians in attendance at any time; about half of them were assembled, the rest having gone to 'The Line,' as the Canadian Pacific railway is called, to trade.

Compared with the number at Fort Hope or Osnaburg, there was a mere handful at English River, and it did not take long to explain to the Indians the reason why the commission was visiting them. As these people cannot be considered a separate band, but a branch of the Albany band, it was not thought necessary to have them sign the treaty, and they were merely admitted as an offshoot of the larger and more important band.

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The terms of the treaty having been fully explained, the Indians stated that they were willing to come under its provisions, and they were informed that by the acceptance of the gratuity they would be held to have entered treaty, a statement which they fully realized. As the morrow was Sunday, and as it was important to proceed without delay, they were paid at once.

We left the English River post early on Monday morning, and reached the mouth of the river at 6 p.m. Coming again into the Albany, we met a number of Marten Falls Indians who had not been paid, and who had been camped at the mouth of the river, expecting the commission. After being paid, they camped on the shore near us, and next morning proceeded on their way to Marten Falls, with their York boats laden with goods from Fort Albany. The next day a party of Albany Indians were paid at the mouth of Cheepy river, and the post itself was reached on the morning of August 3, at 9.30. Here the commissioners had the advantage of receiving much assistance from Mr. G. W. Cockram, who was just leaving the post on his way to England, and Mr. A. W. Patterson, who had just taken charge in his stead.

In the afternoon the chief men selected by the Indians were convened in a large room in the Hudson's Bay Company's store, and an interesting and satisfactory conversation followed. The explanations that had been given at the other points were repeated here, and two of the Indians, Arthur Wesley and Wm. Goodwin, spoke at some length, expressing on their own behalf and on behalf of their comrades the pleasure they felt upon being brought into treaty and the satisfaction they experienced on receiving such generous treatment from the Crown. Some of the Indians were away at their hunting grounds at Attawapiskat river, and it was thought advisable to postpone the election of chiefs until next year. The Indians were paid on August 4 and 5.

During the afternoon the Hudson's Bay Company's steamer *Inneneew* arrived, with the Right Rev. George Holmes, the Anglican Bishop of Moosonee, on board.

On Saturday the Indians feasted and presented the commissioners with an address written in Cree syllabic, of which the following is a translation:—

'From our hearts we thank thee, O Great Chief, as thou hast pitied us and given us temporal help. We are very poor and weak. He (the Great Chief) has taken us over, here in our own country, through you (his servants).

'Therefore from our hearts we thank thee, very much, and pray for thee to Our Father in heaven. Thou hast helped us in our poverty.

'Every day we pray, trusting that we may be saved through a righteous life; and for thee we shall ever pray that thou mayest be strong in God's strength and by His assistance.

'And we trust that it may ever be with us as it is now; we and our children will in the church of God now and ever thank Jesus.

'Again we thank you (commissioners) from our hearts.'

Fort Albany is an important post of the Hudson's Bay Company, and here there are two flourishing missions, one of the Roman Catholic and one of the Church of England. Father Fafard has established a large boarding school, which accommodates 20 Indian pupils in charge of the Grey Nuns from the parent house at Ottawa. Here assistance is given to sick Indians in the hospital ward, and a certain number of aged people who cannot travel with their relatives are supported each winter. The church and presbytery are commodious and well built, and the whole mission has an air of prosperity and comfort. The celebration of mass was well attended on Sunday. The Church of England mission is also in a flourishing condition. The large church was well filled for all Sunday services conducted by Bishop Holmes, and the Indians took an intelligent part in the services.

We left Albany on the morning of Monday, August 17, in a sail-boat chartered from the Hudson's Bay Company, and, the wind being strong and fair, we anchored off the mouth of Moose river at 7 o'clock the same evening. Weighing anchor at daylight on Tuesday morning, we drifted with the tide and a light, fitful wind and reached Moose Factory at 10.30. We had been accompanied on the journey by Bishop Holmes,

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who immediately upon landing interested himself with Mr. J. G. Mowat, in charge of this important post of the Hudson's Bay Company, to secure a meeting of representative Indians on the morrow.

On the morning of the 9th a meeting was held in a large room placed at our disposal by the Hudson's Bay Company. The Indians who had been chosen to confer with us seemed remarkably intelligent and deeply interested in the subject to be discussed. When the points of the treaty were explained to them, they expressed their perfect willingness to accede to the terms and conditions. Frederick Mark, who in the afternoon was elected chief, said that the Indians were all delighted that a treaty was about to be made with them; they had been looking forward to it for a long time, and were glad that they were to have their hopes realized and that there was now a prospect of law and order being established among them. John Dick remarked that one great advantage the Indians hoped to derive from the treaty was the establishment of schools wherein their children might receive an education. George Teppaise said they were thankful that the King had remembered them, and that the Indians were to receive money, which was very much needed by many who were poor and sick. Suitable responses were made to these gratifying speeches by ourselves and Bishop Holmes, and the treaty was immediately signed. Payment commenced next day and was rapidly completed.

It was a matter of general comment that the Moose Factory Indians were the most comfortably dressed and best nourished of the Indians we had so far met with.

On the evening of Thursday the Indians announced that they had elected the following chief and councillors: Frederick Mark, James Job, Simon Quatchequan and Simon Cheena. As they were to have their feast in the evening, it was decided to present the flag to the chief on that occasion. The feast was held in a large workshop placed at the disposal of the Indians by the company; and before this hall, just as night was coming on, the flag was presented to Chief Mark. In many respects it was a unique occasion. The gathering was addressed by Bishop Holmes, who began with a prayer in Cree, the Indians making their responses and singing their hymns in the same language. Bishop Holmes kindly interpreted the address of the commissioners, which was suitably replied to by Chief Mark. It may be recorded that during our stay at this point a commodious church was crowded every evening by interested Indians, and that the good effect of the ministrations for many years of the Church Missionary Society were plain, not only at Moose Factory but after the immediate influence of the post and the missionaries had been left. The crew from Moose Factory which accompanied the commissioners as far as Abitibi held service every night in camp, recited a short litany, sang a hymn and engaged in prayer, a fact we think worthy of remark, as in the solitude through which we passed this Christian service made a link with civilization and the best influences at work in the world which had penetrated even to these remote regions. On Friday, August 11, the question of a reserve was gone into, and settled to the satisfaction of ourselves and the Indians. A description of the location is given in the schedule of reserves.

During our stay we had the opportunity of inspecting Bishop's Court, at one time the residence of the Bishop of Moosonee, but which the present bishop intends to convert into a boarding school for Indian children. The hospital under the supervision of Miss Johnson was also inspected. A report upon the work performed there and the manner of its performance will be found in Dr. Meindl's report, which is attached hereto.

On Saturday, August 12, we left Moose Factory at 12.30. For one week we were engaged with the strong rapids of the Moose and Abitibi rivers, and did not reach New Post, our next point of call, until 12.30 on Saturday, the 19th. New Post is a small and comparatively unimportant post of the Hudson's Bay Company. It is situated on a beautiful bend of the Abitibi river, and commands an excellent hunting country. The post is in charge of Mr. S. B. Barrett, and nowhere was the commission received

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with greater consideration and hospitality than at this place. The New Post Indians, although few in number, are of excellent character and disposition. They met us with great friendliness. The treaty was concluded on Monday, the 21st, and the Indians were at once paid. The reserve question was also discussed, and the location finally fixed as shown by the schedule of reserves. One of the leading Indians, Esau Omakes, was absent from the reserve during the negotiations. He, however, arrived during the time the payments were being made, and signified his approval of the action taken by his fellow Indians. He was subsequently chosen unanimously as chief of the band.

We started for Abitibi on Tuesday morning, August 22. On the previous evening the chief had announced to the commissioners his intention of accompanying the party, with five companions, to assist in passing the difficult series of portages which lie immediately above New Post. One unacquainted with the methods of travel in these regions will not perhaps realize the great assistance this was to the party. At a moderate estimate, it saved one day's travel; and this great assistance was to be rendered, the chief said, without any desire for reward or even for maintenance on the route (they were to bring their own supplies with them), but simply to show their good-will to the commissioners and their thankfulness to the King and the government for the treatment which had been accorded them. They remained with us until the most difficult portages were passed, and left on the evening of August 24, with mutual expressions of good-will. As we ascended the Abitibi evidences of approaching civilization and of the activity in railway construction and surveying, which had rendered the making of the treaty necessary, were constantly met with. Surveying parties of the Transcontinental railway, the Tiniskaming and Northern Ontario railway and Ontario township surveyors were constantly met with.

On the morning of August 29 we reached Lake Abitibi, camped at the Hudson's Bay Company's winter post at the Narrows on the same evening, and arrived at Abitibi post the next night at dusk. We did not expect to find many Indians in attendance, as they usually leave for their hunting grounds about the first week in July. There were, however, a few Indians who were waiting at the post in expectation of the arrival of the commission. There were assembled at 2.30 on the afternoon of August 31, and the purpose of the commission was carefully explained to them. Until we can report the successful making of the treaty, which we hope to accomplish next year, we do not think it necessary to make any further comment on the situation at this post. A full list of the Indians was obtained from the officer in charge of the Hudson's Bay Company's post, Mr. George Drever. Mr. Drever has thorough command of the Cree and Ojibway languages, which was of great assistance to the commissioners at Abitibi, where, owing to the fact of the Indians belonging to the two provinces, Ontario and Quebec, it was necessary to draw a fine distinction, and where the explanations had to be most carefully made in order to avoid future misunderstanding and dissatisfaction. Mr. Drever cheerfully undertook this difficult office and performed it to our great satisfaction.

We left Abitibi on the morning of September 1, with an excellent crew and made Klock's depot without misadventure on Monday, September 4. We reached Haileybury on the 6th and arrived at Ottawa on September 9.

In conclusion we beg to give a short resumé of the work done this season. Cession was taken of the tract described in the treaty, comprising about 90,000 square miles, and, in addition, by the adhesion of certain Indians whose hunting grounds lie in a northerly direction from the Albany river, which may be roughly described as territory lying between that river and a line drawn from the northeast angle of Treaty No. 3, along the height of land separating the waters which flow into Hudson bay by the Severn and Winisk from those which flow into James bay by the Albany and Attawapiskat, comprising about 40,000 square miles. Gratuity was paid altogether to 1,617 Indians, representing a total population, when all the absentees are paid and allowance made for names not on the list, of 2,500 approximately. Throughout all the negotiations we carefully guarded against making any promises over and above those

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written in the treaty which might afterwards cause embarrassment to the governments concerned. No outside promises were made, and the Indians cannot, and we confidently believe do not, expect any other concessions than those set forth in the documents to which they gave their adherence. It was gratifying throughout to be met by these Indians with such a show of cordiality and trust, and to be able fully to satisfy what they believed to be their claims upon the governments of this country. The treatment of the reserve question, which in this treaty was most important, will, it is hoped, meet with approval. For the most part the reserves were selected by the commissioners after conference with the Indians. They have been selected in situations which are especially advantageous to their owners, and where they will not in any way interfere with railway development or the future commercial interests of the country. While it is doubtful whether the Indians will ever engage in agriculture, these reserves, being of a reasonable size, will give a secure and permanent interest in the land which the indeterminate possession of a large tract could never carry. No valuable water-powers are included within the allotments. The area set apart is, approximately, 374 square miles in the Northwest Territories and 150 square miles in the province of Ontario. When the vast quantity of waste and, at present, unproductive land, surrendered is considered, these allotments must, we think, be pronounced most reasonable.

We beg to transmit herewith copy of the original of the treaty signed in duplicate, schedule of reserves, and the report of Dr. A. G. Meindl upon the health and physical characteristics of the Indians.

We have the honour to be, sir,

Your obedient servants,

DUNCAN C. SCOTT,

SAMUEL STEWART,

DANIEL G. MACMARTIN,

Treaty Commissioners.

SCHEDULE OF RESERVES—TREATY No. 9.

OSNABURG.

In the province of Ontario, beginning at the western entrance of the Albany river running westward a distance estimated at four miles as far as the point known as 'Sand Point' at the eastern entrance of Pedlar's Path bay, following the shore of this point southwards and around it and across the narrow entrance of the bay to a point on the eastern shore of the outlet of Paukunjeesenane-seepee, thence due south; to comprise an area of twenty square miles.

In the Northwest Territories, beginning at a point in the centre of the foot of the first small bay west of the Hudson's Bay Company's post, thence west a frontage of ten miles and north a sufficient distance to give a total area of fifty-three square miles.

FORT HOPE.

In the Northwest Territories, beginning at Kitchesagi on the north shore of Lake Eabamet extending eastward along the shore of the lake ten miles, lines to be run at right angles from these points to contain sufficient land to provide one square mile for each family of five, upon the ascertained population of the band.

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MARTEN FALLS.

In the Northwest Territories, on the Albany river, beginning at a point one-quarter of a mile below the foot of the rapid known as Marten Falls down stream a distance of six miles and of sufficient depth to give an area of thirty square miles.

ENGLISH RIVER.

In the province of Ontario, beginning at a point on the Kenogami or English river, three miles below the Hudson's Bay Company's post, known as English River post, on the east side of the river, thence down stream two miles and with sufficient depth to give an area of twelve square miles.

PORT ALBANY.

In the Northwest Territories, beginning at the point where the North river flows out of the main stream of the Albany, thence north on the west side of the North river a distance of ten miles and of sufficient depth to give an area of one hundred and forty square miles.

MOOSE FACTORY.

In the province of Ontario, beginning at a point on the east shore of Moose river at South Bluff creek, thence south six miles on the east shore of French river, and of sufficient depth to give an area of sixty-six square miles.

NEW POST.

In the province of Ontario, beginning at a point one mile south of the northeast end of the eastern arm of the lake known as Taquahtagama, or Big lake, situated about eight miles inland south from New Post on the Abitibi river, thence in a northerly direction about four miles, and of sufficient depth in an easterly direction to give an area of eight square miles.

The reserves are granted with the understanding that connections may be made for settlers' roads wherever required.

DUNCAN C. SCOTT,
SAMUEL STEWART,
DANIEL G. MACMARTIN,
Treaty Commissioners.

OTTAWA, September 2, 1905.

The Honourable
The Supt. General of Indian Affairs,
Ottawa.

SIR,—As medical attendant to the Indians with commission of Treaty 9, I beg to submit this report.

Having obtained a supply of medicines and instruments necessary for emergencies and general surgical purposes, I visited the following bands of Indians:—

1. Osnaburg. 2. Fort Hope. 3. Marten Falls. 4. Albany. 5. Moose Factory. 6. New Post. 7. Abitibi.

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On arrival at an encampment with my interpreter, inquiry was made and attention immediately given to those who were so ill as to be confined to tents. Afterwards a 'surgery' was equipped, where the Indians came with their families for medical examination, treatment and vaccination.

In this region the adult Indian is far below the average size and weight of the white man. He is of a spare type, about 5 feet 7 inches, and weighs 125 pounds. Muscles and bones undeveloped; stature stooping, with a long, narrow, thin chest. The appearance of the face is expressive of a lack of energy and sluggishness. The forehead is broad and prominent, the eyes sunken, the nose large, lips full, and the lower jaw heavy and thick. The hair is black and of strong growth. Intelligence and reasoning powers of a low state. However, a few exceptional, sturdy specimens of man were met with.

The children to six years of age show an abundance of subcutaneous fat, are well developed and very healthy. This condition no doubt is due to their extra natural food supply, the mothers nursing every child to six.

From 6 to 15 lack of development is noticed; the death-rate is high, tuberculosis and infectious diseases acting acutely. From 15 to 25 same conditions exist, except diseases are better resisted and become more chronic. Of the large number in families (average about 13) only one-third reach adult life.

Throughout the journey tuberculosis and dyspeptic derangements are found to be prevalent. Overlooking intermarriage and heredity, the chief causes are due to aborigines being vulnerable to contagious diseases, and to their mode and means of living. Although apparently remaining in pure, fresh air, they are very lacking in cleanliness, overcrowded in wigwams or tents, poorly clothed and exposed to wet and cold. Excepting the small amount of provisions obtained from the fur-traders, they are wholly dependent on fish and game as a food-supply. In a territory where both these are so variable, it is almost a constant state of semi-starvation or overfeeding. These irregularities lead to malnutrition, hence there is very little resisting power, which leaves them an open prey to all the contagious diseases. These conditions in the very worst aspect occur among the inland Indians, of the Albany waters, where they have very little chance to come in contact or imitate the white man, and the missionaries have practically just commenced their valuable work among these bands. Besides spiritual teachings, hygienic principles are energetically taught and readily put into practice; the result is obvious among those on James bay coast and on the Abitibi waters, where years of missionary labour and schools show a much better developed, both intellectual and physical, man. For the welfare of the Indians everything should be done to aid and encourage these good men in their noble efforts.

Including several minor symptomatic and nervous ailments, the following is a 'list of conditions' present, and the cases in which medicine and treatment were given at:—

1. Osnaburg—

Ojibeways.—Never had any medical help, the whole band in very unhealthy condition. Tuberculosis actively present in 65 per cent.

Acute ulcerative endocarditis.	1
Cholera infantum.	17
Meningitis, T.B.C.	1
Chlorosis.	12
Otitis media.	2
Cataract.	4
1. Scabies	The whole band.
2. Pediculi	
Impetigo contagiosa.	30
Teeth extracted.	12
Vaccinated.	107
Lacerated wound of hand.	

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2. Fort Hope—

Tuberculosis.. . . .	35 per cent.
Scurvy.. . . .	1
Hernia.. . . .	1
Chlorosis.. . . .	5
Peritonitis acute.. . . .	1
Cholera infantum.. . . .	5
Taenia.. . . .	28
Ulcerative stomatitis.. . . .	1
Erysipelas.. . . .	1
Herpes zoster.. . . .	2
Teeth extracted.. . . .	17
Vaccinated.. . . .	201
Removed a dermoid cyst from face.	

3. Marten Falls—

Tuberculosis.. . . .	45 per cent.
Peritonitis acute.. . . .	1
Otitis media.. . . .	1
Taenia.. . . .	3
Epilepsy.. . . .	1
Dysentery.. . . .	5
Prolapsus ani.. . . .	2
Vaccinated.. . . .	47
Teeth extracted.. . . .	3
Aspirated a pleurisy.	

4. Albany—

Here the sick are attended to by four Grey Nuns, graduate nurses of Ottawa General Hospital. There are two large airy wards for patients in the convent. A supply of drugs on hand, which are liberally dispensed, not only to the coast Indians, but to the inlanders from Fort Hope and Marten Falls, who come down the river for Hudson's Bay Company's supplies.

Tuberculosis.. . . .	20 per cent.
Ascites.. . . .	1
Pneumonia.. . . .	1
Otitis media.. . . .	2
Iritis.. . . .	1
Gonorrhea.. . . .	3
Taenia.. . . .	13
Synovitis elbow.. . . .	1
Teeth extracted.. . . .	20
Vaccinated.. . . .	268
Removed one finger on account of septic infection.	
Removed tuberculous fluid from abdomen, 2.	

5. Moose Factory—

Previously to five years ago several physicians had practised here, I found about 40 per cent of all the children vaccinated. The English Church mission has a neatly equipped hospital, with Miss Johnston, a very competent nurse in charge. There is ample room for 7 patients. Both this hospital and the one at Albany deserve great credit as to the state of health among the Indians. During the recent epidemics of grippe and measles, the death-rate was practically reduced to nil as a result of the splendid assistance rendered by these institutions.

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Tuberculosis.. . . .	20 per cent.
Stomatitis.. . . .	1
Taenia.. . . .	11
Meningitis.. . . .	1
Epilepsy.. . . .	1
Scurvy.. . . .	1
Circumcision.. . . .	1
Infected hand.. . . .	1
Ecthyma.. . . .	1
Herpes.. . . .	1
Prolapsus Ani.. . . .	3
Teeth extracted.. . . .	17
Vaccinated.. . . .	146

6. New Post—

Small band well developed and comparatively healthy.

Tuberculosis.. . . .	10 per cent.
Synovitis.. . . .	1
Impetigo.. . . .	5
Vaccinated.. . . .	23
Teeth extracted.. . . .	3

7. Abitibi—

Tuberculosis.. . . .	10 per cent.
Epilepsy.. . . .	1
Hernia.. . . .	1
Synovitis.. . . .	1
Infected arm.. . . .	1
Vaccinated.. . . .	98
Teeth extracted.. . . .	9

Tuberculosis was found in various tissues, especially in the lungs, serous membranes, lymphatic glands, bones and skin. The chronic ulcerative and fibroid types of infection in the lungs were the most common forms.

After a very close inquiry and observation I am glad to report an almost total absence of venereal disease in any form. Another very striking feature was the variety of rheumatism or its consequences.

In conclusion as to the future good health of these Indians may I add a few suggestions. There must be an improvement in their ways of living. Hygienic principles (cooking, regularity in food, clothing, ventilation, &c., &c.) shown and taught will necessarily show marvellous results. This can best be accomplished by the opening of schools or through the missionaries.

Finally, to alleviate the present sufferers, considerable medical assistance can be rendered by keeping a good supply of medicines with the nurses at Albany and Moose Factory.

Yours obediently,

A. G. MEINDL.

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JAMES' BAY TREATY—TREATY No. 9.

OTTAWA, October 5, 1906.

The Honourable
The Supt. General of Indian Affairs.
Ottawa.

SIR,—The operations of the Treaty 9 commission during last season ceased at Abitibi, as owing to the absence of the most influential Indians interested in the proposed negotiations it was found impossible to complete the business at that point. In addition to the Abitibi Indians there also remained a number comprising probably a third of the whole population of the treaty situated at various Hudson's Bay Company's posts, north of the height of land, and scattered along the line of the Canadian Pacific railway as far west as Heron Bay.

Accordingly, to meet and conclude negotiations with these Indians, the commissioners left Ottawa on May 22. Some changes in the party had of necessity to be made. Mr. T. C. Rae, who last year had charge of transportation, was unable to accompany the commission. In his place Mr. Pelham Edgar, of Toronto, who acted as secretary, was added to the party. The services of Mr. J. L. Vanasse, Dominion police constable, were alone retained, as, owing to promotion, Mr. Parkinson could not be detailed for the work. With these exceptions the personnel of the party was the same as last year.

The route to Fort Abitibi from Mattawa, which latter place was left on the morning of May 23, was by the Canadian Pacific railway to Timiskaming, thence by boat to New Liskeard and North Timiskaming. A portage of 17 miles had next to be encountered before reaching Quinze lake, the starting point by canoe for Fort Abitibi.

Arrangements were completed on the morning of May 29 for departure, but a violent wind-storm prevented our starting. Through the kindness of Mr. McCaig, foreman for Mr. R. H. Klock, we were able to leave at one o'clock in the afternoon by 'alligator' boat *Trudel*, for The Barrier, 10 miles distant, the first portage north of our starting point. Here we were obliged to camp, as the river was blocked for a considerable distance by a 'drive' of logs.

At half-past nine on the morning of the 30th the 'drive' was all through, and we were able to leave for the post, which was reached at three in the afternoon of June 4.

A majority of the Indians had arrived, but there were a number reported to be on the way who were expected within a day or two. It was thought advisable to wait for them, the interval being utilized by the commissioners in preparing the pay-lists, and by the doctor in giving medical advice to those requiring it.

On June 7, the looked-for Indians having arrived, a meeting was called for the afternoon of that day. Some difficulty was anticipated in negotiating the treaty at Abitibi owing to the peculiar position of the Indians who trade at that post. The post is situated a few miles within the province of Quebec, and the majority of the Indians who trade there belong to that province. It was natural for the Indians to conclude that, as it was the Dominion government and not the provincial government that was negotiating the treaty, no distinction would be made between those hunting in Ontario and those hunting in Quebec. The commissioners had, however, to state that they had no authority to treat with the Quebec Indians, and that the conference in regard to the treaty could only be held with those whose hunting grounds are in the province of Ontario. The Quebec Indians were, however, given to understand that a conference would be held with them later, and that upon their signifying where they

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desired to have a reserve set apart for them, the government would undertake to secure, if possible, the land required by them at the place designated.

The policy of the province of Ontario has differed very widely from that of Quebec in the matter of the lands occupied by the Indians.

In Ontario, formerly Upper Canada, the rule laid down by the British government from the earliest occupancy of the country has been followed, which recognizes the title of the Indians to the lands occupied by them as their hunting grounds, and their right to compensation for such portions as have from time to time been surrendered by them. In addition to an annual payment in perpetuity, care has also been taken to set apart reservations for the exclusive use of the Indians, of sufficient extent to meet their present and future requirements.

Quebec, formerly Lower Canada, on the other hand, has followed the French policy, which did not admit the claims of the Indians to the lands in the province, but they were held to be the property of the Crown by right of discovery and conquest. Surrenders have not, therefore, been taken from the Indians by the Crown of the lands occupied by them.

The reserves occupied by the Indians within the province of Quebec are those granted by private individuals, or lands granted to religious corporations in trust for certain bands. In addition, land to the extent of 230,000 acres was set apart and appropriated in different parts of Lower Canada under 14 and 15 Vic., chap. 106, for the benefit of different tribes.

Several reserves have also been purchased by the Federal government for certain bands desiring to locate in the districts where the purchases were made.

The conference with the Ontario Indians proved to be highly satisfactory. When the terms of the treaty were fully explained to them through Mr. George Drever, who has a mastery of several Indian dialects, Louis McDougall, jr., one of the principal men of the band, stated that they were satisfied with the conditions offered and were willing to faithfully carry out the provisions of the treaty. They would also rely upon the government keeping its promises to them. The band hoped that the reserve to be set apart for them would include as great an extent of lake frontage as possible. The other Indians being asked whether they were all of like mind with the spokesman in regard to the treaty, replied that they were, and that they were willing that representatives of the band should sign for them at once. The treaty was accordingly signed by the commissioners and representative Indians, as well as by several witnesses who were present at the conference.

In the forenoon of June 8, payments of annuities were made with great care, in order that only those Indians whose hunting grounds are in Ontario should have their names placed on the list. The commissioners are satisfied that in the performance of this duty they were successful.

In the afternoon an election of a chief and councillors was held, which resulted in Louis McDougall, jr., being chosen as chief and Michel Penatouche and Andrew McDougall as councillors.

A conference was also held with representative Indians regarding the reserves desired by the band. The conclusion arrived at will be seen by reference to the schedule of reserves attached. After due deliberation the Quebec Indians decided upon the location of their reserve.

The usual feast was held, at which the presentation of a flag and a copy of the treaty took place.

The commissioners and the medical officer having concluded their duties, we left on the morning of June 19 for Quinze lake, which place was reached on the evening of the 12th.

On the morning of the 13th the long and difficult portage between Quinze lake and North Timiskaming was crossed, and at the latter place the boat was taken for Haileybury. Latchford was reached by the Timiskaming and Northern Ontario railway on the afternoon of the 14th. The crew, consisting of five men from Temagami and a

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number of Indians from Matachewan post, including Michel Baptiste, who was afterwards elected chief, assembled late in the afternoon, and on the morning of the 15th we left by way of Montreal river for Matachewan. The post at Matachewan was reached on the afternoon of June 19, after a difficult journey owing to the numerous rapids in the river and the height of the water. Matachewan is beautifully situated at a point on the Montreal river upon high ground; the lofty shores of the stream are thickly wooded.

A conference was held with the Indians on the afternoon of the 20th. As usual, the terms of the treaty were fully explained, and an opportunity given the Indians to ask any questions regarding any matter on which further information was desired. Michel Baptiste, on behalf of the Indians, said that the terms of the treaty were very satisfactory to them, and that they were ready to have representatives of the band sign at once. The treaty was therefore signed and witnessed with all due formality.

Payments were made on the 21st to the 79 Indians. The election for a chief resulted in Michel Baptiste being chosen for that position, and at the feast in the evening he was presented with a flag and a copy of the treaty.

The location of the reserve desired by the Indians received careful consideration, and no objection can, it is thought, be taken to the site finally decided upon.

Arrangements had been made for leaving Matachewan early in the morning of the 23rd, but a heavy rain-storm prevented our doing so before half-past four in the afternoon.

The return trip was made by way of Montreal river, Lady Evelyn lake and Lake Temagami to Temagami station. From the latter place we proceeded by train to Biscotasing, our point of departure both for Fort Mattamagi and Flying Post. At Biscotasing we also expected to meet a number of Indians belonging to Treaty 9, who reside in the vicinity of that place during the summer months.

Biscotasing was reached at twenty minutes past four on the afternoon of Saturday, June 30, and the commissioners were obliged to remain there awaiting the men from Mattagami who were to bring them by canoe to that place, and who did not arrive until the evening of July 3.

We left for Mattagami on the morning of July 4. The Fort was reached about ten on the morning of July 7, when a cordial welcome was given us by Mr. Joseph Miller, who is in charge of that post. We also met at the post Dr. W. Goldie and his brother, of Toronto, who were spending their holidays at that place. Dr. W. Goldie had been giving the Indians free medical attendance as far as the medicine he had with him permitted, and he also offered his services in association with Dr. Meindl during our stay at the post. Here we also met Mr. Kenneth G. Ross, chief forest ranger for the district, and several of his assistants, who had come to the post owing to the Indians employed by them desiring to be present at the treaty.

The Indians treated with at Mattagami were well dressed, and appeared to be living comfortably. A degree of unusual cleanliness was to be observed in their surroundings and habits. They gave a cheerful hearing to the terms of the proposed treaty, which was fully explained to them through Mr. Miller, who acted as interpreter. They, like the other Indians visited, were given an opportunity to ask any questions or to make any remarks they might desire with reference to the propositions made to them.

The Indians held a short conversation among themselves, and then announced through Joseph Shemaket, one of their number, that they were fully satisfied with the terms of the treaty, and were prepared to have it signed by representatives of the band. The treaty was, therefore, at once signed and witnessed. Payments were begun and concluded in the afternoon, and preparations made for the feast. An election for chief was also held, resulting in Andrew Lake being chosen for that position, to whom a flag and a copy of the treaty were presented in the presence of the band.

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It is considered by the commissioners that the reserve selected, as shown by the schedule of reserves, should meet with approval.

Mattagami was left on the morning of July 9, and Biscotasing reached on the evening of the 11th. The party left on the afternoon of the 12th for Flying Post and arrived there about eleven on the morning of the 15th (Sunday). The Indians at Flying Post, although small of stature, are lively and energetic, and the journey from Biscotasing to Flying Post and return was rendered enjoyable by the cheerfulness with which they undertook all tasks, and the quickness with which they accomplished the journey. The Indians were assembled on the morning of the 16th, and the terms of the treaty were fully explained through Mr. A. J. McLeod, Hudson's Bay officer, who acted as interpreter. Isaac, one of the leading Indians, speaking for the band, said that they thankfully accepted the benefits offered by the treaty and were willing to observe its provisions. The treaty was, therefore, duly signed and witnessed. The Indians also signified their desire regarding the position of the reserve to be allotted to them, and their choice, as indicated in the schedule, is recommended for approval. Albert Black Ice was unanimously elected as chief of the band, and at the feast which was held in the evening, the usual presentation of a flag and a copy of the treaty was made. The return journey to Biscotasing was begun on the morning of July 17, and that place was reached on the afternoon of the 19th. On the morning of the 20th payments were made to the Indians of Flying Post and Mattagami residing at Biscotasing.

The work of the commission was facilitated by the assistance of Mr. J. E. T. Armstrong, who is in charge of the Hudson's Bay Company's store at that place, and who is thoroughly familiar with the Indians. The considerable Indian population at this point is made up of stragglers from the Spanish River band of the Robinson treaty, and from Flying Post and Mattagami. They make their living by acting as guides and canoeists for sportsmen, and occasionally work in the mills. Their children have the advantage of attendance at a day school to which the department has been able to give some financial assistance, and also the benefit of mingling on terms of educational equality with white children.

We left for Chapleau about a quarter-past four in the afternoon, and arrived about seven in the evening. Here we were met by the Right Rev. Geo. Holmes, Bishop of Moosonee, and Rev. C. Banting, who aided us in every way possible in the discharge of our duties at Chapleau. Mr. J. M. Austin, who has had long experience with the Indians of that place, also gave us valuable assistance.

It was not necessary to make treaty with the Indians of Chapleau, as they belong to bands residing at Moose Factory, English River, and other points where treaty had already been made. They were, however, recognized as members of the bands to which they belong, and were paid the gratuity due them, after being informed as to what the acceptance of the money by them involved.

Reference to the schedule of reserves will show that small areas are recommended for the Ojibeways and Crees at this point. Large reserves having been set apart for the bands to which they belong at other points in the province, it is only thought advisable and necessary to give them a sufficient area upon which to build their small houses and cultivate garden plots. The Ojibeway reserve is contiguous to the land purchased by the Robinson treaty Indians, which has already been considerably improved.

Payments having been completed at Chapleau, the party left on the evening of the 22nd for Missinabi and arrived at that station at eight in the evening. This place is of considerable local importance as being the point of departure of one of the main routes to Moose Factory and James bay by way of Missinabi river. There is also direct water communication with Michipicoten on Lake Superior.

Bishop Holmes, with Rev. Mr. Ovens and his wife and two lady missionaries, who had expected to accompany us as far as New Brunswick House, on their way to

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Moose Factory, arrived at Missinaibi on the morning of July 23. Their crew had, however, been awaiting them for several days and they were, therefore, able to leave at once for their destinations. Our crew, with a canoe from New Brunswick House, did not reach Missinaibi until the evening of the 23rd, and our departure was thus delayed until the morning of the 24th.

New Brunswick House was reached on the afternoon of the 25th, where we found the bishop and his party, who had only arrived a few hours before us. This post is situated at the northern end of the beautiful Missinaibi lake, and the outlook from the post is delightful.

The Indians were assembled in the evening, and the terms of the treaty explained to them. On being asked whether they had any questions to ask or any remarks to make, they replied, through Mr. J. G. Christie, Hudson's Bay Company's officer, that they were perfectly satisfied with what they were to receive under the treaty, and were willing to sign at once. The signatures of the commissioners and of five of the leading men were, therefore, affixed to the treaty, as well as that of six witnesses. Payments were made on the 25th to about 100 Indians. Alex. Peckotay was chosen by the Indians for the position of chief, and he was presented with a flag and a copy of the treaty at the feast held on the evening of the 26th. A conference regarding the reserve to be set apart was also held. The decision arrived at in regard to this matter will be seen by reference to the schedule attached.

Our duties, as well as those of the doctor, being concluded, we left on the morning of the 28th for Missinaibi, and arrived at that place on the afternoon of the 29th.

Payments were made on the 30th to 98 Moose Factory Indians who live at Missinaibi.

We left on the 31st for Heron Bay, our point of departure for Long Lake, and arrived at the former place at half-past twelve in the afternoon. Arrangements for canoes were not completed until the afternoon of the following day, so that it was not until a quarter to five that we were able to leave for the last post to be visited by us.

The route to Long Lake is at all times a rather difficult one, but was more than ordinarily so this season owing to the water in the Pic river being unusually low. The post was reached on the morning of the 5th. We were accompanied on this trip by Mr. H. A. Tremayne, District Inspector, Hudson's Bay Company, and his wife and young daughter.

A conference was held with the Indians on August 9, and their adhesion to treaty obtained. Peter Taylor, speaking for the Indians, said they were perfectly satisfied with the terms of the treaty, and much pleased that they were to receive annuity like their brethren of the Robinson Treaty, and also that they were to be granted land which they could feel was their own. Payments were made to 135 Indians. The question of a reserve was carefully gone into, and the commissioners have no hesitation in recommending the confirmation of the site chosen.

The Indians of Treaty 9 stated that they desired to have Newatchkigigswabe, the Robinson Treaty chief, recognized as their chief also, as he had been recognized by them in the past. This was agreed to, and at the feast held on the evening of August 9 the usual presentation of a flag and a copy of the treaty was made. At the conclusion of the feast the chief spoke, thanking the government for what had been done for the Indians of Long Lake. He said that the Indians who had been receiving annuity money for years were glad that their brethren were now placed on an equal footing with them. He hoped that provision would be made for their sick and destitute, as even in the best seasons the Indians found it to be very difficult to do more than make a living, and were able to do very little towards assisting one another. In reply, the chief was informed that the government was always ready to assist those actually requiring help, but that the Indians must rely as much as possible upon their own exertions for their support.

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The return journey was begun on the afternoon of August 10, and Heron Bay was reached on the evening of the 14th. At this place we concluded our duties in connection with the making of the treaty by paying English River Indians, now residing at Montizambert.

The commissioners have pleasure in referring to the evident desire of the Indians at all points visited to display their loyalty to the government, by the reception given to the commissioners, and also by their recognition of the benefits conferred upon them by the treaty.

We desire also to acknowledge the kind attention paid to us and the assistance given by the officers of the Hudson's Bay Company and Revillon Frères.

Nine hundred and fifteen Indians were paid at the points mentioned. Inspector J. G. Ramsden, who visited the Indians who joined treaty in the summer of 1905, paid 2,047. The population of the whole treaty may, therefore, be placed at 3,000 approximately.

Attached to this report will be found a copy of the treaty with signatures as completed, schedule of reserves, and Dr. Meindl's report.

We have, &c.,

DUNCAN C. SCOTT,

SAMUEL STEWART,

D. G. MACMARTIN,

Treaty Commissioners.

SCHEDULE OF RESERVES—TREATY No. 9, 1906.

ABITIBI.

In the province of Ontario, beginning at a point on the south shore of Abitibi lake, at the eastern boundary of the township of Milligan projected, then east following the lake shore to the outlet of Kaquaquakechewaig (Current-running-both-ways) creek, and of sufficient depth between the said creek and the eastern boundaries of the townships of Milligan and McCool to give an area of thirty square miles.

MATACHEWAN.

In the province of Ontario, inland and north from Fort Matachewan, beginning at the creek connecting a small lagoon with the northwest shore of Turtle lake, thence south on the west shore of said lake a sufficient distance to give an area of sixteen square miles.

MATTAGAMI.

In the province of Ontario, on the west side of Mattagami lake. Three-quarters of a mile north of a point opposite the Hudson's Bay Company's post, thence north following the lake front a distance of four miles, and of sufficient depth to give an area of twenty square miles.

FLYING POST.

In the province of Ontario, commencing at a point half a mile south of Six-mile rapids, on the east side of Ground Hog river, thence south a distance of four miles, and of sufficient depth to give an area of twenty-three square miles.

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OJIBEWAYS—CHAPLEAU.

In the province of Ontario, one hundred and sixty acres abutting and south of the reserve sold to the Robinson Treaty Indians, one mile below the town of Chapleau.

MOOSE FACTORY CREEKS—CHAPLEAU.

In the province of Ontario, one hundred and sixty acres fronting Kerchesquashosing river.

NEW BRUNSWICK HOUSE.

In the province of Ontario, beginning at the entrance to an unnamed creek on the west shore of Missinaibi river, about half a mile southwest of the Hudson's Bay Company's post, thence north four miles, and of sufficient depth to give an area of twenty-seven square miles.

LONG LAKE.

In the province of Ontario, beginning at a point where the 'Suicide' or Little Albany river enters Long lake, thence in a southerly direction four miles, following the lake frontage, of a sufficient depth to give an area of twenty-seven square miles.

The reserves are granted with the understanding that connections may be made for settlers' roads wherever required.

DUNCAN C. SCOTT,
S. STEWART,
D. GEO. MacMARTIN,
Treaty Commissioners.

OTTAWA, August 20, 1906.

The Honourable
The Supt. General of Indian Affairs,
Ottawa.

SIR,—This year in completing Treaty 9, I again accompanied the commission as medical attendant to the Indians. My work was done in a similar manner to last year, and I dealt with the following bands:—

1. Abitibi. 2. Matachewan. 3. Mattagami. 4. Flying Post. 5. New Brunswick House. 6. Long Lake.

Even though these Indians are near civilization, the type of man and mode of living is practically the same as we met in 1905.

The following conditions were noted:—

ABITIBI.

These Indians are comparatively well nourished and fairly healthy. Plenty of food (game and fish) is easily obtained. Tuberculosis not so very active. The sick are occasionally fortunate enough to have aid from physicians who attend the engineers at present locating the Transcontinental railway.

Tuberculosis.	10 per cent.
Rickets.	2 cases.
Epilepsy.	1
Peritonitis (T. B. C. aspirated).	1

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Cataract.	7
Impetigo.	21
Anaemia (Chlorosis).	18
Eczema.	2
Hæmoptysis.	1
Otitis media.	5
Teeth extracted.	8
Vaccinated	47
Circumcision and drained psoas abscess.	

MATACHEWAN.

In case of accident or illness necessitating urgent treatment the post is within three days' canoeing from the Timiskaming and Northern Ontario railway.

Tuberculosis active.	10 per cent.
Hydrated cyst of liver (aspirated).	1 cases.
Eczema.	2
Chlorosis.	11
Metritis.	1
Palmar abscess (drained).	1
Cataract.	3
Rheumatism.	1
Tonsils removed.	1
Teeth extracted.	10
Vaccinated.	27

MATTAGAMI.

Personal cleanliness and care of tents well observed. Conditions undoubtedly due to valuable work of Dr. Goldie, who had been spending a few months' holiday in this section. He was very charitable during his stay, and kind enough to take a case of tuberculosis of wrist and ankle for treatment to the Sick Children's Hospital, Toronto.

Tuberculosis.	15 per cent.
Chlorosis.	16 cases.
Cataract.	6
Pelvis cellulitis.	1
Sclerosis.	1
Otitis media.	3
Dysentery.	2
Rickets.	1
Eczema.	2
Endocarditis chronic.	1
Teeth extracted.	7
Vaccinated.	28

FLYING POST.

These Indians and those of Mattagami are only a few days' travel from Biscotasing on the Canadian Pacific railway, where a goodly number spend the summer. Here two cases of gonorrhoea came under my notice.

Tuberculosis.	15 per cent.
Gastric ulcer.	1
Ascites (T. B. C. aspirated).	2
Aneurism.	1

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Poliomyelitis ant.	1
Cataract.	3
Iritis.	1
Cholera infantum.	8
Otitis media.	3
Rickets.	2
Epistaxis.	1
Vaccinated.	39
Teeth extracted.	12

NEW BRUNSWICK HOUSE.

A few years ago a virulent form of measles was epidemic. The death-rate was high, depriving the band of nearly one-quarter of its adult men. During our stay a young adult male died from consumption.

Tuberculosis.	15 per cent.
Chlorosis.	19 cases.
Otitis media.	3
Conjunctivitis.	15
Influenza.	5
Carbunculus (transfixed, &c.)	2
Erysipelas.	1
Eczema.	3
Congenital dislocation (hip).	1
Chorea.	1
Taenia.	2
Cataract.	2
Excised phalanx.	1
Vaccinated.	35

A woman, thirty-eight years of age, laid up with a fracture of left hip for over two years, if removed to an hospital where properly treated, the limb can be rendered useful, and the patient able to get about.

LONG LAKE.

Tuberculosis.	15 per cent.
Meningitis (T.B.C.)	1 case.
Chlorosis.	28
Scurvey.	1
Cystitis and orethritis (gonorrheal).	1
Vesical calculus.	1
Cholera infantum.	18
Otitis media.	13
Peritonitis (T.B.C. laparotomy).	1
Mammary abscess (drained).	1
Cataract.	5
Vaccinated.	67

Living near the lines of railway and owing to the recent ingress of surveyors, prospectors and fire-rangers into this region, these Indians come into frequent contact with white men, so ample preparation was made to deal with a large number of venereal cases. I made a most careful search, and can again this year report an almost total absence.

From mode of living and exposure one would expect to find a fair proportion were afflicted with rheumatic fever. A marked absence of this disease or complications was observed. Tuberculosis was generally prevalent, and I can safely state that nearly all these Indians have been or are victims. The disease attacks all tissues, and as a rule

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is chronic. The resistance is an extremely well marked feature, for example, I examined numbers of squaws with lungs fibroid or large cavitation, denoting the existence of tuberculosis for nearly twenty years, who during that time had given birth to ten or twelve children, and now are still more or less actively engaged in their daily duties. Such powers of resistance are marvellous. To fight the disease successfully at present is a difficult problem; to stamp it out in this generation an impossibility. However, a great deal of assistance can be rendered and a lot of suffering alleviated, especially in those cases where the lymphatic glands, bones, joints and serous membranes are affected. A long step in this direction could be taken when the schools on the various reserves are opened, by introducing teachers who have had a thorough course in nursing at one of our well established schools. Hygienic principles would be taught and under such professional guidance put into good practice. This alone would inevitably lead to a total eradication. Often lesions are healed or quiescent, and as already stated, the personal resistance is good, hence, if properly fed, housed and protected, there should be a vast improvement. A nurse could administer to the sick, do surgical dressings, &c. During the short annual visit, the physician would be able to do such minor but important operations as removal of infected glands, clean out tuberculosis cavities, &c., after his departure the dressings and convalescence could be well attended to by the nurse, years of ill health and another source of infection avoided.

Yours obediently,

A. G. MEINDL.

THE JAMES BAY TREATY.

TREATY No. 9.

ARTICLES OF A TREATY made and concluded at the several dates mentioned therein, in the year of Our Lord one thousand nine hundred and five, between His Most Gracious Majesty the King of Great Britain and Ireland, by His Commissioners, Duncan Campbell Scott, of Ottawa, Ontario, Esquire, and Samuel Stewart, of Ottawa, Ontario, Esquire; and Daniel George MacMartin, of Perth, Ontario, Esquire, representing the province of Ontario, of the one part; and the Ojibway, Cree and other Indians, inhabitants of the territory within the limits hereinafter defined and described, by their chiefs and headmen hereunto subscribed, of the other part:—

Whereas, the Indians inhabiting the territory hereinafter defined have been convened to meet a commission representing His Majesty's government of the Dominion of Canada at certain places in the said territory in this present year of 1905, to deliberate upon certain matters of interest to His Most Gracious Majesty, of the one part, and the said Indians of the other.

And whereas, the said Indians have been notified and informed by His Majesty's said commission that it is His desire to open for settlement, immigration, trade, travel, mining, lumbering, and such other purposes as to His Majesty may seem meet, a tract of country, bounded and described as hereinafter mentioned, and to obtain the consent thereto of His Indian subjects inhabiting the said tract, and to make a treaty and arrange with them, so that there may be peace and good-will between them and His Majesty's other subjects, and that His Indian people may know and be assured of what allowances they are to count upon and receive from His Majesty's bounty and benevolence.

And whereas, the Indians of the said tract, duly convened in council at the respective points named hereunder, and being requested by His Majesty's commissioners to name certain chiefs and headmen who should be authorized on their behalf to conduct such negotiations and sign any treaty to be founded thereon, and to become responsible to His Majesty for the faithful performance by their respective hands of such obligations as shall be assumed by them, the said Indians have therefore

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acknowledged for that purpose the several chiefs and headmen who have subscribed hereto.

And whereas, the said commissioners have proceeded to negotiate a treaty with the Ojibeway, Cree and other Indians, inhabiting the district hereinafter defined and described, and the same has been agreed upon, and concluded by the respective bands at the dates mentioned hereunder, the said Indians do hereby cede, release, surrender and yield up to the government of the Dominion of Canada, for His Majesty the King and His successors for ever, all their rights, titles and privileges whatsoever, to the lands included within the following limits, that is to say: That portion or tract of land lying and being in the province of Ontario, bounded on the south by the height of land and the northern boundaries of the territory ceded by the Robinson-Superior Treaty of 1850, and the Robinson-Huron Treaty of 1850, and bounded on the east and north by the boundaries of the said province of Ontario as defined by law, and on the west by a part of the eastern boundary of the territory ceded by the Northwest Angle Treaty No. 3; the said land containing an area of ninety thousand square miles, more or less.

And also, the said Indian rights, titles and privileges whatsoever to all other lands wherever situated in Ontario, Quebec, Manitoba, the District of Keewatin, or in any other portion of the Dominion of Canada.

To have and to hold the same to His Majesty the King and His successors for ever.

And His Majesty the King hereby agrees with the said Indians that they shall have right to pursue their usual vocations of hunting, trapping and fishing throughout the tract surrendered as heretofore described, subject to such regulations as may from time to time be made by the government of the country, acting under the authority of His Majesty, and saving and excepting such tracts as may be required or taken up from time to time for settlement, mining, lumbering, trading or other purposes.

And His Majesty the King hereby agrees and undertakes to lay aside reserves for each band, the same not to exceed in all one square mile for each family of five, or in that proportion for larger and smaller families; and the location of the said reserves having been arranged between His Majesty's commissioners and the chiefs and headmen, as described in the schedule of reserves hereto attached, the boundaries thereof to be hereafter surveyed and defined, the said reserves when confirmed shall be held and administered by His Majesty for the benefit of the Indians free of all claims, liens, or trusts by Ontario.

Provided, however, that His Majesty reserves the right to deal with any settlers within the bounds of any lands reserved for any band as He may see fit; and also that the aforesaid reserves of land, or any interest therein, may be sold or otherwise disposed of by His Majesty's government for the use and benefit of the said Indians entitled thereto, with their consent first had and obtained; but in no wise shall the said Indians, or any of them, be entitled to sell or otherwise alienate any of the lands allotted to them as reserves.

It is further agreed between His said Majesty and His Indian subjects that such portions of the reserves and lands above indicated as may at any time be required for public works, buildings, railways, or roads of whatsoever nature may be appropriated for that purpose by His Majesty's government of the Dominion of Canada, due compensation being made to the Indians for the value of any improvements thereon, and an equivalent in land, money or other consideration for the area of the reserve so appropriated.

And with a view to show the satisfaction of His Majesty with the behaviour and good conduct of His Indians, and in extinguishment of all their past claims, He hereby, through His commissioners, agrees to make each Indian a present of eight dollars in cash.

His Majesty also agrees that next year, and annually afterwards for ever, He will cause to be paid to the said Indians in cash, at suitable places and dates, of which

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the said Indians shall be duly notified, four dollars, the same, unless there be some exceptional reason, to be paid only to the heads of families for those belonging thereto.

Further, His Majesty agrees that each chief, after signing the treaty, shall receive a suitable flag and a copy of this treaty to be for the use of his band.

Further, His Majesty agrees to pay such salaries of teachers to instruct the children of said Indians, and also to provide such school buildings and educational equipment as may seem advisable to His Majesty's government of Canada.

And the undersigned Ojibeway, Cree and other chiefs and headmen, on their own behalf and on behalf of all the Indians whom they represent, do hereby solemnly promise and engage to strictly observe this treaty, and also to conduct and behave themselves as good and loyal subjects of His Majesty the King.

They promise and engage that they will, in all respects, obey and abide by the law; that they will maintain peace between each other and between themselves and other tribes of Indians, and between themselves and others of His Majesty's subjects, whether Indians, half-breeds or whites, this year inhabiting and hereafter to inhabit any part of the said ceded territory; and that they will not molest the person or property of any inhabitant of such ceded tract, or of any other district or country, or interfere with or trouble any person passing or travelling through the said tract, or any part thereof, and that they will assist the officers of His Majesty in bringing to justice and punishment any Indian offending against the stipulations of this treaty, or infringing the law in force in the country so ceded.

And it is further understood that this treaty is made and entered into subject to an agreement dated the third day of July, nineteen hundred and five, between the Dominion of Canada and Province of Ontario, which is hereto attached.

In witness whereof, His Majesty's said commissioners and the said chiefs and headmen have hereunto set their hands at the places and times set forth in the year herein first above written.

Signed at Osnaburg on the twelfth day of July, 1905, by His Majesty's commissioners and the chiefs and headmen in the presence of the undersigned witnesses, after having been first interpreted and explained.

Witnesses:

THOMAS CLOUSTON RAE, C.T.,
Hudson's Bay Co.
ALEX. GEORGE MEINDL, M.D.
JABEZ WILLIAMS, Clerk, H. B. Co.

DUNCAN CAMPBELL SCOTT.
SAMUEL STEWART.
DANIEL GEORGE MACMARTIN.
his
MISSABAY x
mark
his
THOMAS x MISSABAY.
mark
his
GEORGE x WAHWAASHKUNG.
mark
his
KWIASH x
mark
his
NAHOKEESIC x
mark
his
OOMBASH x
mark
his
DAVID x SKUNK.
mark
his
JOHN x SKUNK.
mark
his
THOMAS x PANACHEESE.
mark

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Signed at Fort Hope on the nineteenth day of July, 1905, by His Majesty's commissioners and the chiefs and headmen in the presence of the undersigned witnesses, after having been first interpreted and explained.

Witnesses:

F. X. FAFARD, O.M.I.
 THOMAS CLOUSTON RAE.
 ALEX. GEORGE MEINDL, M.D.
 CHAS. H. M. GORDON, H. B. Co.

DUNCAN CAMPBELL SCOTT.
 SAMUEL STEWART.
 DANIEL GEORGE MACMARTIN.

his
 YESNO, x
 mark
 his
 GEORGE x NAMAY.
 mark

his
 WENANGASIE x DRAKE.
 mark

his
 GEORGE x QUISEES.
 mark

his
 KATCHANG, x
 mark
 his

MOONIAS, x
 mark

his
 JOE x GOODWIN.
 mark

his
 ABRAHAM x ATLOOKAN.
 mark

his
 HARRY x OOSKINEEGISH.
 mark
 his

NOAH x NESHINAPAI.
 mark

his
 JOHN A. x ASHPANAQUESHKUM.
 mark

his
 JACOB x RABBIT.
 mark

Signed at Marten Falls on the twenty-fifth day of July, 1905, by His Majesty's commissioners and the chief and headmen in the presence of the undersigned witnesses, after having been first interpreted and explained.

Witnesses:

THOMAS CLOUSTON RAE, C. T., H. B. Co.
 ALEX. GEORGE MEINDL, M.D.
 SAMUEL ISERHOFF.

DUNCAN CAMPBELL SCOTT.
 SAMUEL STEWART.
 DANIEL GEORGE MACMARTIN.

his
 WILLIAM x WHITEHEAD.
 mark
 his

WILLIAM x COASTER.
 mark
 his

DAVID x KNAPAYSWET.
 mark

his
 OSTAMAS x LONG TOM.
 mark

his
 WILLIAM x WEENJACK.
 mark

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Signed at Fort Albany on the third day of August, 1905, by His Majesty's commissioners and the chiefs and headmen in the presence of the undersigned witnesses, after having been first interpreted and explained.

Witnesses:

THOMAS CLOUSTON RAE, C. T., H.B.Co.	DUNCAN CAMPBELL SCOTT.
A. W. PATTERSON.	SAMUEL STEWART.
G. W. COCHRAN.	DANIEL GEORGE MACMARTIN.
ALEX. GEORGE MEINDL, M.D.	his
JOSEPHIA PATTERSON.	CHARLIE x STEPHEN.
MINNIE COCKRAM.	mark
	his
	PATRICK x STEPHEN.
	mark
	his
	DAVID GEO. x WYNNE.
	mark
	his
	ANDREW x WESLEY.
	mark
	his
	JACOB x TAHTAIL.
	mark
	his
	JOHN x WESLEY.
	mark
	his
	XAVIER x BIRD.
	mark
	his
	PETER x SACKANEY.
	mark
	his
	WM. x GOODWIN.
	mark
	his
	SAML. x SCOTT.
	mark

Signed at Moose Factory on the ninth day of August, 1905, by His Majesty's commissioners and the chiefs and headmen in the presence of the undersigned witnesses, after having been first interpreted and explained.

Witnesses:

GEORGE MOOSONEE.	DUNCAN CAMPBELL SCOTT.
THOMAS CLOUSTON RAE, C. T., H.B.Co.	SAMUEL STEWART.
JOHN GEORGE MOWAT, H. B. Co.	DANIEL GEORGE MACMARTIN.
THOMAS BIRD HOLLAND, B.A.	his
JAMES PARKINSON.	SIMON SMALLBOY, x
	mark
	his
	GEORGE TAPPAISE, x
	mark
	HENRY SAILOR—Signed in Cree syllabic.
	JOHN NAKOGEE “ “
	JOHN DICK “ “
	SIMON QUATCHEWAN “ “
	JOHN JEFFRIES “ “
	FRED. MARK “ “
	his
	HENRY UTAPPE, x
	mark
	his
	SIMON CHEENA, x
	mark

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Signed at New Post on the twenty-first day of August, 1905, by His Majesty's commissioners and the chiefs and headmen in the presence of the undersigned witnesses, after having been first interpreted and explained.

Witnesses:

THOMAS CLOUSTON RAE, C. T., H.B.Co.
 SYDNEY BLENKARNE BARRETT, H. B. Co.
 JOSEPH LOUIS VANASSE.

DUNCAN CAMPBELL SCOTT.
 SAMUEL STEWART.
 DANIEL GEORGE MACMARTIN.
 his
 ANGUS x WEENUSK.
 mark
 his
 JOHN x LUKE.
 mark
 his
 WILLIAM x GULL.
 mark

Signed at Abitibi on the seventh day of June, 1906, by His Majesty's commissioners and the chiefs and headmen in the presence of the undersigned witnesses, after having been first interpreted and explained.

Witnesses:

GEORGE DREVER.
 ALEX. GEORGE MEINDL, M.D.
 PELHAM EDGAR.

DUNCAN CAMPBELL SCOTT.
 SAMUEL STEWART.
 DANIEL GEORGE MACMARTIN.
 his
 LOUIS x McDUGALL, SR.
 mark
 his
 ANDREW x McDUGALL.
 mark
 his
 OLD x CHEESE.
 mark
 his
 MICHEL x PENATOUCHE.
 mark
 LOUI MACDUGALL.
 ANTOINE PENATOUCHE.

Signed at Matachewan on the twentieth day of June, 1906, by His Majesty's commissioners and the chiefs and headmen in the presence of the undersigned witnesses, after having been first interpreted and explained.

Witnesses:

PELHAM EDGAR.
 GEORGE MONTEITH.
 ALEX. GEORGE MEINDL, M.D.

DUNCAN CAMPBELL SCOTT.
 SAMUEL STEWART.
 DANIEL GEORGE MACMARTIN.
 his
 MICHEL x BATISE.
 mark
 his
 ROUND x EYES.
 mark
 his
 THOMAS x FOX.
 mark
 his
 JIMMY x PIERCE.
 mark

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Signed at Mattagamui on the seventh day of July, 1906, by His Majesty's commissioners and the chiefs and headmen in the presence of the undersigned witnesses, after having been first interpreted and explained.

Witnesses:

JOS. MILLER.

PELHAM EDGAR.

A. M. C. BANTING.

KENNETH ROSS.

DUNCAN CAMPBELL SCOTT.

SAMUEL STEWART.

DANIEL GEORGE MACMARTIN.

his
ANDREW x LUKE.mark
JOSEPH SHEMEKET—Signed in syllabic characters.

THOMAS CHICKEN—Signed in syllabic characters.

JAMES NEVUE—Signed in syllabic characters.

Signed at Flying Post on the sixteenth day of July, 1906, by his Majesty's commissioners and the chiefs and headmen in the presence of the undersigned witnesses, after having been first interpreted and explained.

Witnesses:

A. J. MCLEOD.

PELHAM EDGAR.

ALEX. GEORGE MEINDL, M.D.

JOSEPH LOUIS VANASSE.

DUNCAN CAMPBELL SCOTT.

SAMUEL STEWART.

DANIEL GEORGE MACMARTIN.

ALBERT BLACK ICE—Signed in syllabic characters.

JOHN ISAAC—Signed in syllabic characters.

WILLIAM FROG “ “

THOMAS FROG “ “

Signed at New Brunswick House on the twenty-fifth day of July, 1906, by His Majesty's commissioners and the chiefs and headmen in the presence of the undersigned witnesses, after having been first interpreted and explained.

Witnesses:

GEORGE MOOSONEE.

JAMES G. CHRISTIE.

GRACE MCTAVISH.

CLAUDE D. OVENS.

PELHAM EDGAR.

EDMUND MORRIS.

DUNCAN CAMPBELL SCOTT.

SAMUEL STEWART.

DANIEL GEORGE MACMARTIN.

ALEX. PEEKETAY—Signed in syllabic characters.

his
POOTOOSH, x
markhis
PETER MITIGONABIE, x
mark

TOM NESHWABUN—Signed in syllabic characters.

JACOB WINDABAIE—Signed in syllabic characters.

Signed at Long Lake on the ninth day of August, 1906, by His Majesty's commissioners and the chiefs and headmen in the presence of the undersigned witnesses, after having been first interpreted and explained.

Witnesses:

H. A. TREMAYNE.

ISABELLA TREMAYNE.

P. GODCHERE.

PELHAM EDGAR.

DUNCAN CAMPBELL SCOTT.

SAMUEL STEWART.

DANIEL GEORGE MACMARTIN.

KWAKIGIGICKWEANG—Signed in syllabic characters.

KENESWABE—Signed in syllabic characters.

MATAWAGAN “ “

ODAGAMEA “ “

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AGREEMENT BETWEEN THE DOMINION OF CANADA AND THE PROVINCE OF ONTARIO.

THIS AGREEMENT made on the third day of July, in the year of Our Lord, 1905, between

The Honourable Frank Oliver, Superintendent General of Indian Affairs, on behalf of the government of Canada

Of the one part:

And

The Honourable Francis Cochrane, Minister of Lands and Mines of the province of Ontario, on behalf of the government of Ontario

On the other part.

Whereas, His Most Gracious Majesty the King of Great Britain and Ireland is about to negotiate a treaty with the Ojibeway and other Indians inhabitants of the territory within the limits hereinafter defined and described by their chiefs and headmen for the purpose of opening for settlement, immigration, trade, travel, mining and lumbering, and for such other purposes as to His Majesty may seem meet, a tract of country bounded and described as hereinafter mentioned, and of obtaining the consent thereto of His Indian subjects inhabiting the said tract, and of arranging with them for the cession of the Indian rights, titles and privileges to be ceded, released, surrendered and yielded up to His Majesty the King and His successors for ever, so that there may be peace and good-will between them and His Majesty's other subjects, and that His Indian people may know and be assured of what allowances they are to count upon and receive from His Majesty's bounty and benevolence, which said territory may be described and defined as follows, that is to say, all that portion or tract of land lying and being in the province of Ontario, bounded on the south by the height of land and the northern boundaries of the territory ceded by the Robinson-Superior Treaty of 1850, and the Robinson-Huron Treaty of 1850, and bounded on the east and north by the boundaries of the said province of Ontario as defined by law, and on the west by a part of the eastern boundary of the territory ceded by the Northwest Angle Treaty No. 3; the said land containing an area of ninety thousand square miles, more or less, said treaty to release and surrender also all Indian rights and privileges whatsoever of the said Indians to all or any other lands wherever situated in Ontario, Quebec, Manitoba, or the district of Keewatin, or in any other portion of the Dominion of Canada.

And whereas, by the agreement made the 16th day of April, 1894, entered into between the government of the Dominion of Canada, represented by the Honourable T. Mayne Daly, and the government of the province of Ontario, represented by the Honourable John M. Gibson, in pursuance of the statute of Canada passed in the fifty-fourth and fifty-fifth years of Her Majesty's reign, chaptered five and intituled, 'An Act for the settlement of certain questions between the governments of Canada and Ontario respecting Indian lands,' and the statute of Ontario passed in the fifty-fourth year of Her Majesty's reign, chaptered three, and intituled, 'An Act for the settlement of certain questions between the governments of Canada and Ontario respecting Indian lands,' and by the sixth clause of the said agreement it is provided, 'That any future treaties with the Indians in respect of territory in Ontario to which they have not before the passing of the said statutes surrendered their claim aforesaid, shall be deemed to require the concurrence of the government of Ontario,' and by the said intended treaty it is signified and declared that His Majesty show his satisfaction with the behaviour and good conduct of His Indian subjects, and in extinguishment of all their past claims through His commissioners, will make to each Indian a present of eight dollars in cash, and will also next year and annually afterwards for ever cause to be paid to each of the said Indians in cash, at suitable places and dates, of which the said Indians shall be duly notified, the sum of four dollars, and that unless there be some exceptional reason, such sums will be paid only to heads of families for those belonging thereto.

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It is therefore agreed by and between the governments of Canada and of Ontario as aforesaid, as follows:—

That, subject to the provisions contained in the hereinbefore recited agreement of 16th April, 1894, and also the agreement made on 7th July, 1902, by counsel on behalf of the governments of the Dominion and Ontario, intervening parties, upon the appeal to the Judicial Committee of the Privy Council in the suit of the Ontario Mining Company v. Seybold et al. (Ont. S.P., 1904, No. 93), a copy whereof is hereto attached; and the surrender of the Indian title within Ontario to the entire territory herein defined and described, duly obtained,—

The government of the province of Ontario hereby gives consent and upon the following conditions concurs in the terms proposed to be entered into, made and agreed by the said treaty, in so far that the said government of Ontario, on and after the payment to the Indians of the above mentioned present of eight dollars, and thereafter the payment annually of four dollars to each Indian, for ever, as above specified, promises and agrees to pay the said sums to the government of Canada, upon request when and as the same are paid to the Indians, upon proof, when required, of such payments—such payments to be free from any expenses at the cost of Ontario attendant upon distribution of the said sums of money.

And the government of Ontario, subject to the conditions aforesaid, further concurs in the setting apart and location of reserves within any part of the said territory, as surrendered or intended to be surrendered, in area not greater than one square mile for each family of five, or in like proportion, at points to be chosen by the commissioners negotiating the said treaty, one of the said commissioners to be appointed by the Lieutenant Governor of Ontario in Council, and the selection of the said reserves to be subject to the approval of the Lieutenant Governor in Council.

And the government of Ontario stipulates no part of the expense of survey and location of the said reserves to be at any time at the cost of the government of Ontario.

And further, that no site suitable for the development of water-power exceeding 500 horse-power shall be included within the boundaries of any reserve.

It is also agreed between the parties hereto that no part of the cost of negotiating the said treaty is to be borne by the province of Ontario.

In witness whereof, these presents have been signed and sealed on behalf of the government of Canada by the Honourable Frank Oliver, Superintendent General of Indian Affairs, and on behalf of the government of Ontario by the Honourable Francis Cochrane, Minister of Lands and Mines.

Signed, sealed and delivered by the Honourable Frank Oliver, in presence of FRANK PEDLÉY, and by the Honourable Francis Cochrane in the presence of GEO. W. YATES.

FRANK OLIVER.
F. COCHRANE.

Agreement between counsel on behalf of the Dominion and Ontario, intervening parties upon the appeal to the Judicial Committee of the Privy Council in Ontario Mining Company vs. Seybold et al.

As to all treaty Indian reserves in Ontario (including those in the territory covered by the Northwest Angle Treaty, which are or shall be duly established pursuant to the statutory agreement of one thousand eight hundred and ninety-four), and which have been or shall be duly surrendered by the Indians to sell or lease for their benefit, Ontario agrees to confirm the titles heretofore made by the Dominion, and that the Dominion shall have full power and authority to sell or lease and convey title in fee simple or for any less estate.

The Dominion agrees to hold the proceeds of such lands when or so far as they have been converted into money upon the extinction of the Indian interest therein, subject to such rights of Ontario thereto as may exist by law.

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As to the reserves in the territory covered by the Northwest Angle Treaty which may be duly established as aforesaid, Ontario agrees that the precious metals shall be considered to form part of the reserves and may be disposed of by the Dominion for the benefit of the Indians to the same extent and subject to the same undertaking as to the proceeds as heretofore agreed with regard to the lands in such reserves.

The question as to whether other reserves in Ontario include precious metals to depend upon the instruments and circumstances and law affecting each case respectively.

Nothing is hereby conceded by either party with regard to the constitutional or legal rights of the Dominion or Ontario as to the sale or title to Indian reserves or precious metals, or as to any of the contentions submitted by the cases of either government herein, but it is intended that as a matter of policy and convenience the reserves may be administered as hereinbefore agreed.

Nothing herein contained shall be considered as binding Ontario to confirm the titles heretofore made by the Dominion to portions of Reserve 38B already granted by Ontario as appearing in the proceedings.

(Sgd.) E. L. NEWCOMBE, *for the Dominion.*

(Sgd.) EDWARD BLAKE, *for Ontario.*

Dated 7th July, 1902.



REPORTS OF PRINCIPALS
OF
BOARDING AND INDUSTRIAL SCHOOLS

PROVINCE OF ONTARIO,
ST. JOSEPH'S INDIAN HOME,
FORT WILLIAM, July 2, 1906.

FRANK PEDLEY, Esq.,
Deputy Supt. General of Indian Affairs,
Ottawa.

SIR,—We have the honour to submit our annual report of the above school, for the fiscal year ended June 30, 1906.

Location.—The school is located on the Fort William reserve, on the south bank of the Kaministiquia river, between East and West Fort William, and about 4 miles from the picturesque Mount McKay.

Land.—About one acre of land surrounds the home, situated in Thunder Bay district. The land is divided into playgrounds, one for boys and another for girls, vegetable garden and flower garden. The soil, though sandy, produces very fine vegetables. Until now the land has been the property of the school, but has been purchased by the Grand Trunk Pacific Railway Company. But another home will be erected on the new reserve at Squaw Bay to carry on the work now done here.

Buildings.—The home is of frame on a stone foundation. Its dimensions are 95 x 45 feet. Painting and decorating on the interior have made it more cheery and attractive. The school-house is not in good condition, but improvements have not been deemed advisable on account of the removal.

Accommodation.—There is ample accommodation for 75 pupils and a staff of 12.

Attendance.—There are 68 pupils registered, 20 boys and 48 girls. During the year 8 children were discharged and 4 others were admitted.

Class-room Work.—The school hours, which are from 9 to 11.45 a.m. and from 1.30 to 3.30 p.m., are faithfully observed. The progress made during the year has been satisfactory.

Farm and Garden.—Although the extent of garden is limited, still the vegetables raised help to supply the home. The boys find weeding here good exercise.

Industries Taught.—Cooking, baking, sewing, darning, mending, laundry and general housework are taught the girls. The boys are trained to habits of neatness and cleanliness, to work in garden, to attend flowers and lawn, and to make proper use of time.

Moral and Religious Training.—A certain time each day is devoted to Christian doctrine; morning and evening prayers are attended in the chapel. The character of each pupil is cultivated with care.

Health and Sanitation.—The general health has been very good. The attending physician has not been called except in one case of severe cold. The sanitary conditions are looked after carefully, and everything is cleaned around the place.

Water Supply.—We have ample water-supply, conveyed to the apartments by means of pipes attached to a windmill.

Fire Protection.—Two hundred feet of hose, two fireman's axes, and three Star glass-lined fire-extinguishers are in readiness.

Heating and Lighting.—The building is heated entirely by three large hot-air furnaces, wood being the fuel used. The means of lighting is the oil lamp.

Recreation.—Outdoor games are very popular. Long walks in suitable weather are enjoyed. In summer picnics are given to the delight of the pupils. Skating and boating in season are the pleasures most loved by the pupils.

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General Remarks.—The children gave an entertainment during the year, to which parents and benefactors were invited. The programme consisted of songs, drills, recitations, dialogues and the national anthem.

We had the pleasure of a visit from our Bishop, the Right Rev. D. J. Scollard. He offered many words of encouragement to the children and the staff, and expressed approval of the institution in general.

We are deeply indebted to the pastor of the mission, Rev. P. E. Lamarche, for a generous supply of milk and vegetables, as well as games for the children, but we are still more indebted for his untiring interest in our work and all that concerns the children's welfare.

We have, &c.,

SISTERS OF SAINT JOSEPH.

PROVINCE OF ONTARIO,
MOHAWK INSTITUTE,

BRANTFORD, July 13, 1906.

FRANK PEDLEY, Esq.,
Deputy Supt. General of Indian Affairs,
Ottawa.

SIR.—I have the honour to transmit a report on the Mohawk Institute for the year ended June 30, 1906.

This institution was established by the 'Company for the Propagation of the Gospel in New England and parts adjacent thereto,' established 1649; chartered 1661, called briefly the 'New England Company,' in the year 1831.

Location.—The school is situated in the township of Brantford, about $1\frac{1}{4}$ miles from the market square of the city of Brantford.

Land.—The land comprises 390 acres, as follows: lot No. 5, Eagle's Nest, township of Brantford, 10 acres; Crown grant (on this are the buildings) and 194 acres, by license of occupation; Mohawk Glebe lot, city, 186 acres.

Buildings.—The building is in the form of the letter H, built of red brick, with cut stone basement, roofed with shingles laid on asbestos paper. The main building is 79 x 42 feet, and has two wings, 60 x $36\frac{1}{2}$ feet each. The building is two stories high, with basement and attic.

The Main Building.—In the basement are the stores, including insulated cold store, officers' dining-rooms, boiler-room, girls' clothing-rooms and lavatory. On the first floor are the offices, sewing-room, and female officers' rooms. The second floor contains the superintendent's residence and two sick-rooms.

North Wing.—In the basement is the kitchen and dining halls; on the first floor, class-room, master's room and farm mens' rooms; on the second floor is the boys' dormitory.

South Wing.—The basement comprises the girls' play-room, boot-room and flush water-closets; on the first floor is the class and assembly room, and on the second floor is the girls' dormitory. Each dormitory has an iron fire-escape and door opening into the main building.

Boys' play-house, 74 x 20 feet, two and a half stories; laundry, 30 x 20.3 feet, two stories; dairy, 18 x 13 feet; barn and cow-stable, 97 x 35 feet; silo (cement), 30 x 16 feet; hog pens, 72 x 30 feet and 60 x 13.4 feet; horse and cattle stables, 82.8 x 22.5 feet, with room for 16 horses and 16 cattle. Other buildings are: carpenter's shop, implement-house, drive-house, wagon-shed, poultry-house, two greenhouses and an ice-house.

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Accommodation.—Accommodation is provided for 110 pupils and a staff of 10.

Attendance.—The returns for quarter ending June 30, show 112 pupils, classified as follows:—

Standard I.	8
“ II.	29
“ III.	12
“ IV.	19
“ V.	20
“ VI.	24
	112

The average attendance for the year was 109.

Class-room Work.—This covers the full course prescribed by the department, and the first year of high school work. Three pupils passed the examinations for entrance into the high school.

The school hours are from 8.30 to 12 a.m., and from 1.30 to 4 p.m. in summer; and in winter from 8.45 to 12 a.m., and from 1.30 to 4 p.m., and from 7 to 8 p.m.

All the pupils in standards IV, V and VI have private study from 8.30 to 9.30 p.m.

Pupils form two divisions ‘A’ and ‘B.’ One week ‘A’ division attends school in the morning and ‘B’ division in the afternoon; the next week the order is reversed.

The pupils in standards I and II are in school full time throughout the year.

Farm and Garden.—This department shows good returns for the year, supplying the institution with provisions \$1,379.25, and cash sales, \$4,662.47, besides laying 1,437 square feet of cement sidewalks.

INDUSTRIES TAUGHT.

Carpentry and Cabinet Making.—Most of the fixtures and furniture of the school have been made by the carpenter and his boys.

Farming.—Farming, gardening and the care of greenhouses form the principal occupations of the boys, and include the management of a dairy of over 30 cows and the raising of pigs, also the cultivation of plants and flowers for market.

Girls’ Work.—The girls are trained for domestic work, including sewing, knitting, dressmaking, cooking, baking, laundrying and butter-making. They make all their own clothing, also that of the boys, with the exception of the best tweed uniform, an issue of which is purchased every other year.

Moral and Religious Training.—Morning and evening prayers are conducted for the whole school daily, and divine service at His Majesty’s chapel of the Mohawks at 11 a.m. on Sundays. Religious instruction is given daily in the schools and on Sunday from 9 to 10 a.m., 2.30 to 3.30 p.m., and 7 to 8 p.m.

The boys are organized as a company of cadets, divided into four sections, under senior boys, who are responsible for the cleanliness and order of their respective sections. Four section monitresses exercise similar supervision over the girls.

Health and Sanitation.—The health of the pupils has been excellent. The sanitation is good, the drainage being connected directly with the city sewers.

Water Supply.—The water-supply is from the city waterworks.

Fire Protection.—Fire-protection has been installed in connection with the fire department of the city—four hydrants with supply of hose, two stand pipes with hose connections on all floors, four chemical fire-extinguishers, and two dozen blaze-killer tubes placed in the various buildings, axes and extension ladders. Towards the cost of the above we are indebted to the government for a grant of \$3,000.

Heating and Lighting.—Both wings occupied by pupils have coal furnaces of large capacity, estimated to change the air in school-rooms and dormitories every hour. The main building is heated with hot water, the sewing-room having a radiator con-

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stantly supplied with fresh aid from the outside. The kitchen, laundry and dairy use only natural gas.

All buildings, including horse and cow-stables, are lighted by electricity.

Recreation.—The recreation hours are one hour at noon, two hours in the evening in summer and one hour in the winter, and for school divisions throughout the year from 4 to 5 p.m.; also one half holiday each week.

There is no school from July 16 to August 21. During this time the teachers take their vacation, each pupil has half a day holiday, and the industrial work of the institution goes on as usual.

The boys are furnished in their playground with swings and horizontal bars. They have a field where they play lacrosse, baseball and football; they also have a bugle band in which they are much interested. The girls are provided with swings, croquet, skipping ropes, balls, ping pong, &c. Those who prefer to read are furnished with magazines and books from the school library.

I have, &c.,

R. ASHTON.

Superintendent.

PROVINCE OF ONTARIO,

MOUNT ELGIN INDUSTRIAL INSTITUTE,

MUNCEY, August 4, 1906.

FRANK PEDLEY, Esq.,

Deputy Supt. General of Indian Affairs,
Ottawa.

SIR,—I have the honour to transmit the report on the Mount Elgin Industrial Institute for the year ended June 30, 1906. This institute was founded by the Methodist Missionary Society in the year 1847.

Land.—The farm connected with the institute contains 225 acres, situated on the west bank of the Thames river, in the township of Caradoc, county of Middlesex, province of Ontario. The Courtright branch of the Michigan Central railway connecting St. Thomas with the Sarnia river passes one mile to the north, where is situated the village of Muncey.

Buildings.—The main building has four stories of brick on a stone foundation, and was erected in 1895. The old building, now called the annex, had its foundation laid in 1847, and was re-fitted in 1897 so as to furnish dwellings for two officers, two school-rooms and a four cot hospital. The entire outer walls have been tastily plastered with cement and beaded with squares. This gives the building the appearance of solidity manifest only in stone structures. Laundry—A substantial two-story brick building at present undergoing repairs, which are nearing completion. Boys' lavatory and gymnasium—A two-story frame building standing on a brick basement; this building is also undergoing repairs, which when completed will add materially to the convenience and the comfort of the boys. The outbuildings comprise carpenter-shop, shoe-shop, implement-shed, carriage-house, horse-stable and pig-pen, together with two grain barns and a hay barn on brick and concrete basements which are used for the stabling of cattle.

Grounds.—Extensive playgrounds lie to the north and south of the main building, while in front a large lawn and driveway furnish an attractive approach to the main building. The playground to the north is for the use of the boys; that to the south for the girls.

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Accommodation.—The buildings furnish ample room for from 110 to 115 pupils, and a staff of 12 officers.

Attendance.—The number of pupils authorized by the department for this institute is 100. The attendance for the year just closed averaged 105.

Class-room Work.—The work in this department for the year has proved very satisfactory. Four pupils wrote on Part II high school entrance examination with success, while two senior pupils have successfully prosecuted the public school leaving work. A room for manual training is available, and an effort will be made to equip it for use as soon as financial conditions will permit.

Farm and Garden.—The farm is composed of 200 acres of upland and river flats. The farm is one of the best and most productive in a district noted for its good farms.

Industrial Work.—The boys are instructed in the various branches of agricultural work, such as ploughing, harrowing, tile draining, planting and care of roots and corn, harvesting, &c., rearing and training of horses, cattle and management of pigs. The girls are instructed in domestic work, including baking, cooking, cutting and making of garments, knitting, darning and laundry work.

Moral and Religious Training.—This is kept constantly in mind by the teachers and officers in charge. Morning and evening service, consisting of singing of hymns, the reading of the scriptures and prayers, is held in the chapel. On the Sabbath the pupils attend divine service at the Colbourne Methodist church, an officer always being in attendance. Bible study is conducted in the chapel every Sunday from 2.45 p.m. to 3.45 p.m., and 7 to 8 p.m.

Health.—The general health of the pupils has been good. One boy was discharged suffering from tuberculosis of the lungs, also one girl suffering from a similar affection of the glands of the neck. There were three cases of erysipelas and one of diphtheria, all in a light form.

Water Supply.—I am glad to be able to report the successful operation of a hydraulic ram placed to the south of the orchard, by which the wholesome water springing from the base of the hill to the south of the buildings is forced into the main building, at a point above the first floor, from which point it can be distributed for general use. This fills a long-felt want. The supply of water from the springs above the dam placed across the ravine by the windmill some two years ago all but entirely failed during the extreme drought of the autumn of 1905. To meet the contingency, which was very urgent, a tile drain was started some 200 feet above the dam and extended westward at an average depth of about 10 feet, for a distance of upwards of 25 chains. The water to this tile comes from the overlying sand and gravel that rests upon a basin-shaped boulder of clay. During the nine months since its completion the flow has been ample, and to outer appearances uniform, giving promise of enduring even the stress of dry seasons. The task of doing the work was a heavy one, but the reward promises to be ample.

Fire Protection.—Larger tanks are being installed in the garret of the attic in the main building, and larger pipe connection extending to the different wings and flats of the main building have been placed in position. This, when completed, will greatly improve our appliances for use in case of fire. Open buckets full of water are kept in all the halls.

Heating.—The heating of the main building and annex is furnished by three coal-burning hot-water furnaces. Supplementary heat is furnished the school-rooms by stoves burning wood.

General Remarks.—The work of repairing the boys' play-house, the laundry, and the girls' lavatory is well advanced, and when completed will add very much to the comfort of the pupils. The plumbing in connection with this work promises to be most satisfactory, remedying a sanitary condition deplored for years.

I have, &c.,

T. T. GEORGE,

Principal.

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PROVINCE OF ONTARIO,

THE SHINGWAUK AND WAWANOSH HOMES.

SAULT STE. MARIE, July 11, 1906.

FRANK PEDLEY, Esq.,

Deputy Supt. General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my annual report of the Shingwauk and Wawanosh Homes, for the fiscal year ended June 30, 1906.

Location.—The Shingwauk and Wawanosh Homes are situated on the bank of the St. Mary's river, $1\frac{1}{2}$ miles east of, and within the town limits of Sault Ste. Marie, in the province of Ontario.

Land.—The area of land in connection therewith is 93 acres, comprising park lots 1 and 2, in the Tarentorus township, which was acquired by purchase, and is held in trust by His Lordship the Bishop of Algoma—originally forest, the land is now, with the exception of a few acres, cleared. The soil is extremely light and rocky, and is best adapted for grazing purposes.

Buildings.—The buildings are admirably situated, fronting the river, and consist of:—

1. The Shingwauk and Wawanosh Homes, main block, 160 x 37 feet, with various wings and principal's residence adjoining, in which are the offices of the institution, kitchens, visitors' entrance-hall, staff-rooms, furnace-rooms, lavatories and dormitories.

2. A little to the east and almost in line with the main block, stands a large two-story, frame building, 60 x 30 feet, the ground floor of which is used as a drill-hall and play-room, for the boys. On the upper floor the senior school is held.

3. Some 60 yards from this building, standing due east and west, is the Bishop Fauquier memorial chapel, erected in 1883, with funds subscribed anonymously in England and Canada, as a tangible, enduring and useful memorial to Algoma's first revered bishop.

4. Hospital with attendant's cottage adjoining.

5. Farmer's cottage and laundry, 20 x 40 feet.

6. Carpenter's cottage.

7. Factory.

8. Shoe-shop, barns, stables and various minor buildings.

The following repairs and improvements were effected during the year, namely:—

Repairs to drill-hall, laundry, making new frame for circular saw, building shed over same, repairing boys' closets, repairs to carpenter's cottage and barn, hospital and cottage, and repairs to shafts and pulleys in factory, glazing and general minor repairs, mending furniture, &c.

Accommodation.—There is accommodation for 100 pupils, 60 boys and 40 girls, and 12 members of the staff.

Attendance.—The number of pupils enrolled at the beginning of the year was 59, 38 boys and 21 girls; 4 boys and 1 girl were admitted during the year; 4 boys and 3 girls were discharged; 3 boys and 2 girls died, and 1 boy and 1 girl are temporarily absent on the reserve, thus leaving in the institution at this date 34 boys and 16 girls. The average attendance for the year was 55.

Class-room Work.—The whole school is divided into senior and junior divisions under qualified teachers, in separate buildings. The subjects taught are similar to those in the public schools of Ontario. With the exception of the very little ones, each child goes to school half a day, and works at some individual trade or housework, as

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the case may be, the other half; hence a morning school boy is an afternoon worker and vice versa. This arrangement permits of both the schools and the trades being in operation the full day, and of necessary domestic and general work of the institution being satisfactorily accomplished. A gratifying feature of the year's work is the general, rather than individual, progress made by the pupils. Not only is this particularly noticeable in school work, where promotions were made in every class, but also in the satisfactory results achieved in all branches of manual work.

Industries Taught.—In addition to receiving religious and secular instruction, the girls are taught sewing, laundry and domestic work, and the boys farming and carpentry, under the supervision of qualified instructors. They are bright and teachable generally, and take readily to such employments.

Moral and Religious Training.—The religious training is that of the Church of England. Pupils and staff attend the Shingwauk memorial chapel or St. Luke's pro-cathedral in town, morning and evening prayers are held daily in the school-room and Sunday school on Sunday afternoon. Methods of punishment are fines, impositions, and keeping the pupils in to work on half holidays.

Corporal punishment is administered in cases of gross disobedience only, and as a last resort.

Health and Sanitation.—The general health of the pupils during the year was not as satisfactory as in past years. This was largely the result of an epidemic of typhoid in November in which eleven of our children were laid up, and which resulted in the death of one boy. Two boys and two girls also died of pulmonary consumption. Lime, phenyle and other disinfectants are used freely about the premises. A solution of phenyle or carbolic is used for scrubbing purposes, and all dormitories, floors and passages are scrubbed regularly. Every precaution possible is taken to keep contagious diseases isolated. The school is visited by an appointed medical practitioner.

Water Supply.—Water is obtained from the St. Mary's river by pumping into large tanks placed in the roofs of the main building and laundry. The motive power used for pumping is a 12 horse-power gasoline engine.

Fire Protection.—Hydrants are placed at convenient distances outside of the main buildings and on each flat of the interior, to which one hundred feet of hose kept ready for emergency can be readily attached.

The main building is also supplied with chemical fire-engines and fireman's axes.

Heating and Lighting.—The main building is heated throughout by a hot-water system. The system works well, and is satisfactory. All detached buildings, including the chapel, are heated by stoves. Coal-oil lamps are used entirely for lighting.

Recreation.—The pupils are encouraged in outdoor games. There is also a gymnasium for the boys. In winter the principal recreation is skating and hockey on the St. Mary's river. Books and magazines are also furnished from the school library.

General Remarks.—Our children have shown a keener disposition than ever before to appreciate and benefit by the splendid opportunities afforded them in the Shingwauk and Wawanosh Homes.

No greater stimulus than this, their diligence and perseverance, is needed to push forward with increased zeal and energy the work which lies before us.

I have, &c.,

G. LEY KING,
Principal.

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PROVINCE OF ONTARIO,

WIKWEMIKONG INDUSTRIAL SCHOOL,

WIKWEMIKONG, July 5, 1906.

FRANK PEDLEY, Esq.,

Deputy Supt. General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my annual report of the Wikwemikong industrial school for the year ended June 30, 1906.

Location.—The Wikwemikong industrial school is situated on the unceded portion of Manitoulin island, 10 miles north of the Manitowaning agency, in the village of Wikwemikong, on the west shore of Smith bay.

Land.—The land comprises about 200 acres, 70 of which are under cultivation, the rest being used as pasture. This land was granted by the Indians for the use of the missionaries, and is held in trust by them, for the combined purposes of the mission and the school.

Buildings.—The boys and girls are accommodated in two separate institutions about 200 yards apart, which are managed by two separate staffs, under the supervision of the principal.

The boys have their study and class-rooms, wardrobe and play-hall in a two-story frame building, 50 x 100 feet. The shoemaker-shop is also in this building.

The sick-ward, the kitchen, and the dormitory are in the missionaries' residence, a three-story stone building, 110 x 60 feet, where also the staff have their quarters. The dormitory is particularly healthy, being 108 x 40 feet, with a ceiling 17 feet high, and is well lighted and ventilated. There are in connection with it, baths and water-closets fitted up according to the most approved methods.

The refectory and bakery are located in an old mission stone building, connected with the main building by a passage-way.

The girls and their staff are housed in two three-story frame buildings connected by a passage-way, which are 108 x 50 feet, respectively, and situated further up the hill. Their class-rooms, recreation-hall, and dormitories are spacious and airy.

A few yards to the south stands a two-story frame structure, 40 x 50 feet, used for a wash-room and its various appurtenances, also for a store-room, bakery, &c.

Towards the shore of the bay are located the blacksmith and paint-shops, combined in one building.

Closer to the shore is a little saw and planing-mill, and the carpenter-shop.

There are yet to be mentioned in connection with the farm, three barns, one 80 x 40 feet, another 110 x 40 feet, and a third one, 75 x 35. Each barn has a spacious stable in its basement. Mention should also be made of piggeries, henneries, sheds for agricultural implements and various vehicles, wood-sheds, and ice-house.

Accommodation.—There is ample room to accommodate 80 boys and as many girls, with their respective staffs.

Attendance.—The boys were 77 in number, with 2 teachers and 9 different officers; the girls were 65, with 2 teachers and 7 officers. The day-pupils are not comprised in these figures.

Class-room Work.—This is governed by the official programme of studies for Indian schools. The time appointed for it is from 9 to 11.45 a.m., and 1.30 p.m. to 4, with a short recess in the middle of each session. Besides, the boys have one hour and a half study every day; but, on Sundays and Saturdays they devote three hours to study. There is also a library attached to the institution; and supplementary reading and letter-writing are insisted upon.

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The pupils are divided into four sections, two for the boys and two for the girls, and are under the tuition of four different teachers: pupils of the lower grades being taught in the same room in connection with the day-pupils.

The pupils are graded as follows:—

	Standard	Pupils.
I.	I.	54
"	II.	34
"	III.	23
"	IV.	18
"	V.	13

Farm and Garden.—Farming being eventually the most common occupation of our children when they return home, the boys of the institution are habitually spending some time at this work, even the smallest, every one, of course, according to his capacity.

Industries Taught.—The most common industry of the larger boys is farming, some others are taught carpentering. There was no demand for blacksmithing last year; and, for a few years past, there has been no demand for shoemaking; health interfered with the prosecuting of that branch.

Besides this special training, all the pupils are employed about two hours daily each, according to sex and ability, at various kinds of labour, such as sweeping, scrubbing, sawing and splitting fire-wood, dairying, gardening, feeding stock, helping in the kitchen and on the farm. The laundrying is done at the girls' school, with the help of Indian women. The more advanced girls receive special training in sewing by hand and machine, dressmaking, knitting and cooking. The pupils generally take well to these kinds of labour. The girls in particular show that they appreciate the zeal of their teachers; for, after they have left school they still come regularly once a week to receive lessons in fancy sewing, crocheting, &c.

Moral and Religious Training.—The main object of this institution being the forming of religious men fit for the everlasting ends of our existence, the pupils are taught never to dissociate their studies and their manual labours from religious views. Every day, therefore, there is the memorizing of some lesson of catechism or of Bible history; and several times a week explanations are given, adapted to the capacity of the different classes. The pupils attend all the religious services of the parish church. On Sunday evenings the senior boys and girls are called upon to write a report of either of the two sermons they have heard during the day.

No corporal chastisement is administered, save in cases of gross insubordination or misbehaviour.

Health and Sanitation.—The sanitary condition of the school is all that can be desired. The health of the children has been exceptionally good throughout the year. The boys have their daily bath in the bay, from May till the end of September. The dormitory is moreover supplied with up-to-date baths.

Water Supply.—A windmill, and a tank holding 15,000 gallons, supply excellent water from the Georgian bay for all purposes, galvanized iron pipes conducting it to all parts of the institution.

Fire Protection.—Hydrants in connection with the tank and supplied with two-inch hose on every floor of the main buildings, constitute our principal protection against fire, besides some fire-extinguishers, fireman's axes and buckets. An excellent fire-escape has been added this year to the other appliances of the boys' school; they have a fire-drill every week; the descent of all these pupils can be effected in three minutes. Next year the girls' school will be supplied with a similar apparatus.

Heating and Lighting.—Both schools are heated by box-stoves, and are kept comfortable. The boys' dormitory, however, and the staff's quarters are heated by hot water in connection with the missionaries' residence. Light is furnished by acetylene plants.

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Recreation.—Two hours daily, besides Saturday afternoons, are given exclusively to recreation. The first Tuesday of each month is a free day for every pupil who has given satisfaction throughout the month. Both schools have playgrounds furnished with suitable games and gymnastic appliances, and play-halls for bad weather and evening recreations in winter. The boys' playground has been considerably enlarged this year, and more gymnastic appliances have been added to the former ones.

General Remarks.—I may say confidently that the school is contributing largely to the elevation of the moral tone, the development of habits of thrift and industry, the enlightenment of mind generally, and the improvement of physique among our Indians. Our present pupils appreciate more their training, and rise to a higher level than our former ones. They take more interest in reading, and develop to a certain extent an intellectual life. Their spirit is what we could desire. Their progress is very remarkable, when we consider the huge obstacles they and we have to overcome; for, with very few exceptions, their starting point, for English, is zero; and, for other matters (instruction, manners, education) they are not always what could be desired when these children are first admitted to the school. Notwithstanding these great drawbacks, at the end of their first year all can speak English fairly well, and can follow the explanations of their teachers in little problems requiring the three first rules of arithmetic; and most of those in the fourth and fifth standards could in point of moral and intellectual improvement advantageously compare with the pupils of the same standards in any public school of this province.

Among the improvements of this last fiscal year, not yet mentioned in the present report, are a new and up-to-date linen-room and wardrobe in the boys' school, the organization of the boys as a company of cadets, and their new military uniform. In the girls' school the senior class-room has been furnished with new automatic desks, and a large and excellent blackboard, which permits all the pupils of a section to work simultaneously at the board.

I have, &c.,

TH. COUTURE, S.J.,

Principal.

PROVINCE OF MANITOBA,

BIRTLE BOARDING SCHOOL.

BIRTLE, June 30, 1906.

FRANK PEDLEY, Esq.,

Deputy Supt. General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit the annual report of the Birtle boarding school for the year ended June 30, 1906.

Location.—The school is situated on the north bank of the Birdtail river, within the limits of the town of Birtle, and 15 miles from the nearest reserve.

Land.—There are 30 acres owned by the school, and 30 acres of rented land, all situated in the municipality of Birtle in 6, 17, 26. The most of the land is ravine and wood, making it unfit for cultivation but fair for pasturage. Eleven and one-quarter acres are in crop.

Buildings.—The school is of stone, two and one-half stories in height, with a good basement. The barn is a frame structure with a stone stable and root-house beneath, and a frame machine-shed on the west side. We have also a frame poultry-pen, a log ice-house, and a frame gasoline store-room.

Accommodation.—The building as now arranged accommodates 60 pupils and a staff of 6. Contemplated changes will provide room for 10 more pupils.

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Attendance.—We began the year with 50 pupils, and now have 47. Eight were received and 11 were discharged. Grant is received for 45 pupils.

Class-room Work.—The pupils are progressing steadily in courses prescribed by the department.

Farm and Garden.—We now cultivate $11\frac{1}{4}$ acres, of which $1\frac{1}{4}$ acres are freshly broken. Two acres are broken ready for seeding in 1907. We have now enough land to supply all our vegetables and fodder, and to provide training in the growing of all grains. Twenty acres will be sown in 1907.

Industries.—The girls receive instruction in all house duties, including sewing, knitting, darning, cooking, laundrying, painting and kalsomining. They also are taught gardening and dairying, which includes milking, separating and churning. For themselves they do bead-work in winter and garden in summer. The boys learn milking, care of stock, including horses, cattle and swine, farming, gardening, rough carpenter-work, fencing and the running of a gasoline engine and circular saw. They also have their own garden plots.

Moral and Religious Training.—All the pupils attend the regular Sabbath services, and the older ones the mid-week gatherings of the Birtle Presbyterian church. Each Sabbath evening Miss McLaren conducts a Bible class for those remaining at home. Fortnightly a mission band meets under the supervision of Miss Macgregor. The principal conducts morning and evening prayers, while daily ethical and Biblical instruction is given in the class-room.

Health and Sanitation.—The altitude of the school makes drainage easy. Dry-earth closets have been installed, the chief drain relaid and the plumbing repaired. Save for a severe epidemic of influenza, very little sickness has visited the school.

Water Supply.—Water is procured from the civic spring, the Birdtail river, rains and a well some 900 feet west of the school. From the last, water is conveyed by gravitation and suction to a forty-barrel tank in the basement. A gasoline engine and force pump elevates the water to a similar tank in the attic, when it is conveyed to the kitchen, laundry and bath-rooms. Soft water is stored in a forty-barrel tank in the basement, and from it into two overflow wells outside.

Fire Protection.—On each floor connected with the stand pipe emptying the attic tank, is a two-inch canvas hose, long enough to reach any part of the flat. The hose is kept folded in swinging racks ready for instant use. Fire-axes and pails are distributed over the building, while an iron fire-escape and a good extension-ladder make exit easy.

Heating and Lighting.—Three wood furnaces heat the building. Two are to be replaced. Acetylene gas, obtained from the civic plant, gives a clear and safe light.

Recreation.—Football, baseball, croquet and tennis in summer and skating, hockey and coasting in winter are the chief outdoor sports. The usual children's games are indulged in indoors.

Improvements.—Within the school, the basement has been sheeted, and the heating and plumbing plants overhauled. Outside all the fields save one have been cleared and broken up to the fences, increasing our acreage and improving the appearance of the farm. Over a hundred maple-trees were planted along the driveway leading to the school and around the front lawns. About the latter hedges were sowed also. All the bluffs within a hundred yards of the school have been under-brushed and raked, providing fine, shady playgrounds in summer. A lawn, 50 x 100 feet, has been prepared for croquet, basketball and tennis. Sloping paths, a rustic bridge and stiles were built to provide an easier walk to the town. Stone has been taken off our fields and piled ready for the erection of new calf, swine and poultry pens. The breaking and fencing of several more acres of land provides a respectable acreage for grain as well as vegetable cultivation.

I have, &c.,

W. W. McLAREN,

Principal.

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MANITOBA SUPERINTENDENCY,

CECILIA JEFFREY BOARDING SCHOOL,

KENORA, July 7, 1906.

FRANK PEDLEY, Esq.,

Deputy Supt. General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my annual report for the fiscal year ended June 30, 1906.

Location.—The Cecilia Jeffrey boarding school is situated on the west side of Shoal lake, an arm of the Lake of the Woods, in Ontario, near the boundary of Manitoba, and just east of Shoal Lake reserve, No. 40, and about 45 miles, by water, southwest of Kenora. There is a winter road to Ingolf station on the Canadian Pacific railway, which is 18 miles north of the school.

Land.—A peninsula containing 210 acres, and registered as D. 492, was secured by the Presbyterian Foreign Mission committee from the Ontario government. The soil is excellent, but much of it is broken by rocky ridges. It was heavily timbered, but is being cleared.

Buildings.—The main building is 38 x 66 feet, two stories are of frame and the basement of stone. A new dwelling has been erected for the missionary-principal. It has twelve rooms, and is 36 x 24 feet, with two wings which are 10 x 14 feet and 18 x 12 feet. It has two stories of frame, with stone basement, built by the Presbyterian Foreign Mission committee.

There is a good frame stable building, 24 x 36 feet, with hay-loft, and an ice-house, 8 x 12 feet.

Accommodation.—There are five staff bed-rooms and room for 42 scholars, in the school building.

Attendance.—There are 40 children on the roll, 23 boys and 17 girls. In addition to these there are five non-treaty half-breed children in attendance.

Class-room Work.—The subjects taught are reading, writing, arithmetic, history, geography, drawing, vocal music, calisthenics and general knowledge. The scholars are anxious to learn, and are making good progress under their faithful teacher.

Farm and Garden.—The large kitchen-garden had an excellent yield of all kinds of vegetables. Four small fields of potatoes gave a good crop. Some other cleared land is seeded down with clover and timothy.

The live stock consists of two horses, three cows and three calves.

Industries Taught.—There is no lack of employment. The boys have been building the new residence, clearing new land, cultivating farm and garden, hauling wood and hay, cutting fire-wood, milking, feeding cattle, &c. Some boys are trained as pilots or engineers on our steam launch *Daystar*. The girls get a thorough training in housework, washing, ironing, sewing, mending, cooking and baking. The larger scholars all work half a day and attend school the other half day, changing every month.

Moral and Religious Training.—Church services and Sabbath school are held every Sabbath.

There is also worship every morning and evening, consisting of singing, scripture-reading and prayer. Bible training and personal religious work is earnestly done, and seemingly with good results. The children are also taught to sing and read the Bible in their own language, Ojibeway.

Health and Sanitation.—The health of all has been very good. The situation is airy, and the building is well ventilated, with high ceilings, and is well lighted by large

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windows. The sanitary arrangements are good, the sewer empties on the opposite side of the peninsula from the water intake; the plumbing is well done. But the storage of vegetables in the basement is unsanitary, and more room is needed for them.

Water Supply.—The water-supply is plentiful and excellent, a windmill and two tanks supply all parts of the building with both hot and cold water, both lake and rain water.

Fire Protection.—The above water-supply furnishes excellent fire-protection; hydrants, hose and fire-pails are on every floor. Ladders and axes are kept in readiness. Five new small chemical extinguishers have been added this year, but they seem to be of little use, and we depend more on the water system. The scholars are drilled in getting out quickly and orderly.

Heating and Lighting.—The school building is well heated by two hot-air furnaces, cook-stove and laundry stove; there is plenty of good fire-wood on our own land. Light is furnished by coal-oil lamps.

Recreation.—Football, basketball, boating, swimming, coasting, skating and other games furnish healthful recreation.

General Remarks.—The school is growing steadily in attendance and influence. The Indians are now more in favour of education than ever before. We are not able to make room for all the children who are offered to us. The staff have all done good, earnest work, and the Presbyterian Women's Foreign Missionary Society deserve special thanks for their continuous help in clothing and money, without which the school could not be maintained.

I have, &c.,

AUSTIN G. McKITRICK.

Principal.

PROVINCE OF MANITOBA.

FORT ALEXANDER BOARDING SCHOOL.

FORT ALEXANDER, June 30, 1906.

FRANK PEDLEY, Esq.,

Deputy Supt. General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit the annual report of the Fort Alexander Roman Catholic boarding school for the fiscal year ended June 30, 1906.

Location.—The school is finely situated on the west bank of the Winnipeg river, about a mile from its mouth, where it empties into Lake Winnipeg. The river, where the school stands, is about half a mile wide.

Land.—The lot on which the school is situated is lot No. 60, according to the survey made by J. Lestock Reid, D.L.S., on the west side of Mission property. It has 8 chains frontage, and runs back of the survey road 9 chains. Some of this land was purchased from the Indians.

Buildings and Accommodation.—The school building is 70 x 40 feet, with fine basement and three stories above. In the basement are situated the kitchen, laundry, two dining-rooms, pantries, store-room for vegetables, and furnace-room. On the first floor is the chapel, parlour, two school-rooms and a recreation-room for the boys. On the second floor are two infirmaries, one for boys and the other for girls. The girls' play-room is also on this floor, as are also the sewing-room and apartments for the reverend Sisters. The third floor is taken up with dormitories and rooms for the necessary guardians. Over the third floor are placed three tanks, each of which contains 600 gallons of water, which is pumped from the river with a gasoline engine; this

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water is used throughout the house, and I am glad to say there is no better water in the country.

The building that had been used as a day school before the boarding school was built has been repaired, and an addition of 15 feet built to it, and it is now used as a storehouse; a stone foundation was built, and a good cellar for potatoes and other vegetables added; a small lean-to is occupied by the gasoline engine, which is used for sawing wood, pumping water, and for use of carpenters. This building will also be occupied by the gas plant, which is at present in the school building and cost \$600. I forgot to mention that in the school building a door opens from every floor to a fire-escape on the outside of the building.

Attendance.—The average attendance was 45 pupils.

Class-room Work.—The course prescribed by the department is followed. The children are making good progress. School hours are from 9 to 12 forenoon, and from 2 to 4 afternoon. The grading of the pupils is as follows:—

Standard I.	19
“ II.	4
“ III.	17
“ IV.	3
“ V.	2
Total.	45

Industries Taught.—The larger girls are taught washing, ironing, sewing, knitting and other household work. The boys are made to work in the garden, and other light work outside such as carrying wood and cleaning up premises.

Moral Training.—Great care is given this part of the children’s education. Religious instruction is given daily by the principal.

Health and Sanitation.—The general health of the pupils has been good. An epidemic of measles broke out on the reserve in the spring, and we had our share of it.

Heating and Lighting.—The building is steam-heated throughout, which system is giving good satisfaction. Our gas plant is satisfactory.

Recreation.—Recreation-rooms for the boys and girls are badly needed. A frame building added to each side of the main building, 50 x 25 feet, would answer the purpose. It is hard on the pupils to be shut up in cold or rainy weather. This addition would not cost much, and is a necessity.

I have, &c.,
PH. VALES, O.M.I.,
Principal.

MANITOBA SUPERINTENDENCY,
FORT FRANCES BOARDING SCHOOL,
FORT FRANCES, ONT., July 1, 1906.

FRANK PEDLEY, Esq.,
Deputy Supt. General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my first report on the Fort Frances boarding school for the fiscal year ended June 30, 1906.

Location.—The Fort Frances boarding school is situated on the southwest end of the Rainy lake, on Couchiching reserve, close to the boundary between Canada and the United States.

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Land.—The area of land belonging to the school, and immediately surrounding it, comprises about 45 acres. We have already expended \$1,500 in cutting and removing the timber off the land. It will take about \$1,800 more to clear away the stumps and prepare the property for cultivation. Owing to the sandy nature of the soil it will be necessary, in the near future, to build an embankment 20 chains long in front of the school in order to protect the property against the waves coming from the lake.

Buildings.—The buildings at present in use are as follows:—A house for general workshop, which is a one-story building on a stone foundation, 18 x 30 feet. One part of this building is used for carpenter-work and one room is used for gasoline engine and pump of 50 gallons capacity per minute, and for the gas plant. An ice-house temporarily built is used for this summer. The main edifice, or the institute proper, is a three-story building. Its dimensions are 40 x 70 feet, and the height from the ground to the top roof is 49 feet, with all modern improvements. The basement contains a dining-room for the children and the principal, and a dining-room for the Sisters, a kitchen, a pantry, a dairy-room, a lavatory, and a root-house, the boiler-room for the heating plant, and water-closets at both ends. On the first floor are the entrance, the parlours, the chapel, the school-room, 16 x 36 feet, and the boys' play-room, 16 x 36 feet, provided with two water-closets and a wash-basin, and one other room temporarily used by the principal of the school. On the second floor is situated the girls' play-room, 16 x 36 feet, provided with three water-closets, self-flushers, and a wash-basin, a sewing-room, and three rooms for the staff—the nuns' quarters; two sick-rooms, one for boys and another for girls, provided with water-closets (self-flushers), and wash-basins, cold and hot water, and a bath-room with water-closet, for the use of the Sisters. On the third floor are situated two large dormitories, 38 x 34 feet, provided with four closets and two bath-rooms, one for boys and the other for girls.

Accommodation.—Under present arrangement there is accommodation for 70 pupils and a staff of 10 Sisters.

Attendance.—The pupils being all boarders, the attendance is perfect and regular, and I am happy to state that there has been a marked improvement in general application and proficiency during this first quarter. We have the authorized number of 41 pupils.

Class-room.—The programme of studies prescribed by the department is followed as closely as possible under the circumstances; the difficulties have been already explained to the department in a letter from the inspector. The subjects taught are: religious instruction, grammar, parsing, drawing, spelling, and useful knowledge in arithmetic, history and geography, but special attention is given to reading and writing. The progress is good and encouraging.

Farm and Garden.—There are about 2 acres under cultivation. We have also a garden in which is raised a part of the supply of potatoes and other vegetables required for the use of school.

Industrial Work.—Our children have special hours every day for manual work. The boys are kept working according to their age. They help in caring for horses and do outside work.

The girls are taught sewing, knitting and general housework.

Moral and Religious Training.—Particular attention is given to this important branch of education. A short talk is given daily on some subject such as order, cleanliness, politeness, and obedience; after which hymns are sung. The moral character of each pupil is cultivated with care.

Health and Sanitation.—The sanitary condition of the school, owing to the excellence of our fresh-air drain from the lake and the abundance of light, is very good, and the healthy appearance of the pupils is a surprise to all the visitors. Frequent baths are taken, and the premises are always kept in perfect order.

Water Supply.—Our water-supply is taken from the lake at 1,500 feet distance from the shore; and we have all the water necessary for all purposes, and an unlimited supply at hand in case of fire. The water is first quality.

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Fire Protection.—Fire-protection is abundantly provided for by means of ten fire-extinguishers distributed throughout the building as follows: 3 in the basement, 1 in the kitchen, 1 in the passage and 1 in the boiler-room; 2 on the second floor, 1 at each end of the passage; 2 on the third floor, 1 in each dormitory, and 1 in the attic. Besides that, we have a gasoline engine, and a powerful pump of 50 gallons capacity per minute connected by a two-inch stand-pipe with three tanks in the attic holding 2,100 gallons of water, which tanks can be shut off partially by one valve each or all together by one valve on the two-inch stand-pipe, and the water is then pumped directly into the stand-pipe, which gives a pressure of 100 pounds on $1\frac{1}{2}$ -inch hose with $\frac{1}{2}$ -inch nozzle. These connections are placed: one hose in the attic able to spread the water all over the roof, one hose in each dormitory and one in each floor; also one in the basement and one outside of the building. We have in both ends of the building a fire-escape running from five feet from the ground to the dormitories, with a platform at each floor and a door opening outside on each floor.

The pump and engine are used to elevate the water required to supply the tanks in the attic; from thence it flows through a stand-pipe to the plumbing system, and consequently is always ready for use. The pump can work against 400 feet head water.

The engine is set in motion by an electric spark, and a full stream of water can be had in a few seconds. The engine is also provided with a dynamo, and should a fire start in such a place that the engine could not be operated, we should still have the water pressure from the tank on the hose, which is a pressure of $17\frac{1}{2}$ pounds.

Heating and Lighting.—The building is heated entirely by steam at low pressure; which system gives great satisfaction. The school is lighted throughout with acetylene gas; the Siche machine is in a proper room outside of the school. No lighted lamp is allowed inside, and matches are placed under the control of the attendants.

Recreation.—During the summer baseball is the amusement of the pupils.

General Remarks.—With the co-operation and zealous aid of our good Sisters, we notice a rapid progress being made in the development of intellectual activity amongst the pupils.

I have, &c.,

H. M. BRASSARD, Priest, O.M.I.,

Principal.

MANITOBA SUPERINTENDENCY,

KENORA BOARDING SCHOOL,

KENORA, QNT., July 1, 1906.

FRANK PEDLEY, Esq.,

Deputy Supt. General of Indian Affairs,
Ottawa.

SIR,—I have the honour to forward my annual report for the year ended June 30, 1906.

Location.—This school is situated about 2 miles south of Kenora.

Land.—There are 50 acres of land in connection with this school, much of this land is rock, but there is sufficient soil for gardening purposes.

Buildings.—The school buildings are of frame construction, with brick veneer. The main building is 36 x 30 feet, three stories high, with an extension on the south end, 36 x 26 feet, two stories high.

The other buildings are: cottage, 20 x 16 feet; workshop, 22 x 16 feet; stable and carriage-shed, 46 x 18 feet; hen-house, 18 x 14 feet; laundry and storehouse, 48 x 18 feet.

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New buildings: boat-house, 30 x 20 feet; bath-house, 16 x 12 feet; hen-house, 43 x 24 feet.

Accommodation.—There is accommodation for 40 children.

Attendance.—The attendance is satisfactory; 40 children attended the school during the whole year.

Class-room Work.—The authorized programme of studies is followed. Excellent progress was made by all the children.

Farm and Garden.—There are 7 acres under cultivation.

Industries Taught.—The girls are taught cooking, sewing and general housework. The boys are taught the art of preparing the soil, of planting, and several other useful trades.

Moral and Religious Training.—A certain time each day is devoted to Christian doctrine. Morning and evening prayers are attended in the chapel.

Health and Sanitation.—The general health has been very good.

Water Supply.—The water is supplied from the lake.

Fire Protection.—We have three Dominion fire-extinguishers at convenient places on the different flats. Ladders are kept on hand.

Heating.—The building is heated by two furnaces.

Recreation.—Football is the boys' most popular game during the summer. Both boys and girls enjoy skating in winter.

I have, &c.,

MATHIAS KALMES, O.M.I.,

Principal.

MANITOBA SUPERINTENDENCY—KEEWATIN DISTRICT.

NORWAY HOUSE BOARDING SCHOOL,

NORWAY HOUSE, VIA SELKIRK, MAN., August 23, 1906.

FRANK PEDLEY, Esq.,

Deputy Supt. General of Indian Affairs,

Ottawa.

SIR,—I have the honour of submitting the sixth annual report of the Norway House boarding school for the year ended June 30, 1906.

Location.—The school is situated on the Norway House reserve, at Rossville village. It commands a good view of Little Playgreen lake. It is about 25 miles down the east branch of the Nelson river from the foot of Lake Winnipeg, in the district of Keewatin.

Land.—The school does not own any land at present, but the Indian council proposes setting apart one section for school purposes. We are at present using about 2 acres for vegetables, the bulk of the contemplated grant is useless for agricultural purposes, being very rocky in places and boggy in others. It is all, at present, excepting a few acres, under timber or bush.

Buildings.—There are ten buildings in connection with the school. (a) The main building is a frame structure, built on stone foundation, and consists of two parts, the main part and an annex. The main part has, on the ground floor, a sitting-room, office, girls' play-room, dining-room, and boys' play-room. Upstairs it has girls' dormitory, sewing-room, clothes store-room, matron's bed-room and boys' dormitory. The annex has on ground floor, three bed-rooms, kitchen and groceries store-room. Upstairs there are three isolated rooms for sickness, and four bed-rooms. (b) School-house. A separate building used for class-room only. (c) One log store-house, sheeted outside

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with ship-lap. (d) One large and one small closet. (e) One root-house, which is being rebuilt this year, not having been frost-proof in the past. (f) Stable, consisting of two parts. Main part, 28 x 30 feet, has room for ten head of cattle, and a mow and loft for hay. Annex has large stall for calves and poultry and a loft for hay. The latter is about 20 feet square and has been completed since last report. (g) A wood-shed, 16 x 48 feet. (h) A boat-house, 18 x 28 feet, rebuilt and completed this year. (i) An ice-house, with milk-house inside. The whole building is built as one log house inside another, with a foot and a half space between. This is also the style of rebuilding of the root-house, only that the space between the walls is about 4 feet. A substantial addition has been made to the wharf this year.

Accommodation.—There is accommodation for 60 children and a staff of 6.

Attendance.—The attendance during the past year has been excellent. The year opened with 58 pupils enrolled, and with the exception of a few weeks, remained about the same figure, always being well over the 50 mark. A pleasing feature of this year has been the voluntary offering of children for the school. Truancy has been greatly decreased, and a more contented feeling has apparently prevailed.

Class-room Work.—The regular course prescribed by the department has been faithfully followed, and with satisfactory results.

Farm and Garden.—Farming, in this country, is out of the question, as not more than five or ten per cent of the country is arable land, the remainder being rivers, lakes, rocks and muskegs. About 2 acres are in garden.

Industries Taught.—The girls are taught all branches of ordinary housekeeping, and some fancy-work. The boys have a little training in gardening, carpentering and care of cattle.

Moral and Religious Training.—This is supplied by all the staff in personal talks at suitable opportunities, and also in regular meetings for the purpose. We have morning and evening prayers, when scripture is read and explained, and the children exhorted to obedience thereto. We have a week evening Bible class for young women and girls, also one for the boys. Then all children are taken to church twice each Sabbath, and Sabbath-school is held in the boarding school building.

Health and Sanitation.—During the past year the children have been exceptionally well. We have not had one death during the year, and only one serious case of sickness, and very few cases of any description. As to sanitation, nothing has, as yet, been done about the drainage. It is in bad condition, and a very difficult thing to remedy. During the year we have had two holes opened into the chimneys for ventilation, and one large chimney built with a large double flue, one for smoke and one for ventilation. This latter has openings into the sewing and dining-rooms, and also into the rooms set apart for cases of sickness.

We have three rooms, isolated from the rest of the apartments, for sickness. Two of these are large, 16 x 18 feet, and one small, 12 x 16 feet; the latter for the use of the nurse in attendance on the sick ones. These three rooms are reached by a stairway leading up from the kitchen door, outside. These rooms are certainly of great value to the school.

Water Supply.—We have an abundance of good water in Little Playgreen lake, about 100 yards from the school building.

Fire Protection.—We have several chemical engines on hand, which have not been installed on account of lack of materials for charging them. We have also four large tubes of Eclipse fire-extinguishing powder arranged in suitable places. One barrel is kept full of water in each dormitory and three in the kitchen, and pails near each one, also two axes in convenient places.

Heating and Lighting.—The heating is done by means of two wood furnaces, placed in holes dug for their reception, and by means of numerous stoves, as the furnaces are very inadequate to the needs of the place. The lighting is done entirely by means of coal-oil lamps.

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Recreation.—The chores of the place are performed by the children. They also have regular recess, both a.m. and p.m., and noon hour, and usually from five to six, and for an hour and a half after supper for play each day. The girls are often taken for a walk by some member of the staff, while the boys play at games of football, baseball, quoits, or rove in nearby bush at pleasure.

General Remarks.—The school has certainly grown in favour with the people, as shown by the fact that we have no difficulty in keeping it full of children, and that many are coming asking for the admission of their children.

I have, &c.,

J. A. LOUSLEY.

Principal.

PROVINCE OF MANITOBA,

PINE CREEK BOARDING SCHOOL,

CAMPVILLE, July 1, 1906.

FRANK PEDLEY, Esq.,

Deputy Supt. General of Indian Affairs,
Ottawa.

SIR,—I beg to make my annual report as follows:—

Location.—The Pine Creek boarding school is situated on the west side of Lake Winnipegosis, near the mouth of the Pine creek, on the limits of the Pine Creek reserve. Camperville is the post office.

Land.—Three-quarters of a section of land is connected with the school. The first quarter, viz., No. 1 of township 35, range 19, west of 1st meridian, has been homesteaded. The south half of section 34, township 34, range 20, west of 1st meridian has been bought by the school from the government.

Buildings.—The main building is 115 x 45 feet. There is a basement, two stories and the attic. There are besides one carpenter-shop, one blacksmith-shop, one ice-house and a hen-house. We have built a large stable, 120 x 50 feet.

Accommodation.—Accommodation can be provided for 100 children and the required staff.

Attendance.—The attendance is very good.

Farm and Garden.—There are about 10 acres under crop. Potatoes, beets and turnips are the principal products.

Industries Taught.—The boys are taught the care of cattle and horses, farming and carpentering. The girls learn sewing, knitting, cooking, dairying and the care of poultry.

Moral and Religious Training.—Every day half an hour is given for moral and religious training.

Health and Sanitation.—The health of the children has been good generally. In the spring some of them had the measles. They were isolated. The disease did not spread, and it disappeared altogether.

Water Supply.—A windmill draws the water from the river to the house.

Fire Protection.—There are three fire-extinguishers, four hose, twelve pails and seven axes. There are also three fire-escapes, one iron stairs at the back of the house, and wooden stairs at each end of the house.

Heating and Lighting.—The house is heated by steam and lighted by kerosene.

I have, &c.,

A. CHAUMONT,

Principal.

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PROVINCE OF MANITOBA,
PORTAGE LA PRAIRIE BOARDING SCHOOL,
PORTAGE LA PRAIRIE, July 1, 1906.

FRANK PEDLEY, Esq.,
Deputy Supt. General of Indian Affairs.
Ottawa.

SIR,—I have the honour to forward my annual report for the year ended June 30, 1906.

Location.—This school, which is not situated on a reserve, is about $\frac{1}{4}$ of a mile east of the town of Portage la Prairie.

Land.—There are 2 acres of land in connection with the school. This land is within the corporation of the town, and is owned by the Presbyterian Church. It is very suitable for garden purposes.

Buildings.—The building is of frame, on a stone foundation, with a school-room adjoining. The floors and walls of the entire school were painted and oiled.

Accommodation.—The school can accommodate 30 pupils, with a staff of 3.

Attendance.—The attendance has been very satisfactory in every way. We had an average of 26 pupils during the year.

Class-room Work.—The majority of the children being under twelve years, they are not in advanced standards, but they have made good progress. The children speak English entirely at school. They express themselves better in English than in Sioux.

Farm and Garden.—One acre is used for garden. The other acre is divided into two playgrounds, one for the boys and one for the girls.

Industries Taught.—In the house the girls have been carefully trained in habits of neatness and industry, in the kitchen and laundry, also in sewing and general housework. The boys are employed in cutting wood, gardening, carpentry and any other work which they are able to do.

Moral and Religious Training.—Thirty minutes in the morning and the same in the evening is devoted to religious instruction. They attend the services and Sunday-school of Knox church. The conduct of the children has been good.

Health and Sanitation.—The health of the children, on the whole, has been good. The ventilation of the school is only fair.

Water Supply.—There is a good well, which is sufficient for the needs of the school. There is a soft-water tank in the basement, which will hold twenty barrels.

Fire Protection.—There are a number of exits should fire occur. Our proximity to the town, with a telephone in the building, strengthens our fire-protection, as we could make use of the town fire-brigade.

Heating and Lighting.—The school is heated by hot air, and lighted by electricity.

Recreation.—The girls have many games in summer and skating in winter. The boys have baseball, football, tennis, skating and other athletic sports.

I have, &c.,

W. A. HENDRY,
Principal.

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PROVINCE OF MANITOBA,

SANDY BAY BOARDING SCHOOL,

SANDY BAY, July 2, 1906.

FRANK PEDLEY, Esq.,

Deputy Supt. General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my first annual report for the year ended June 30, 1906.

Location.—The Sandy Bay boarding school is situated in the centre of the Sandy Bay reserve, on the west shore of Lake Manitoba.

Land.—One hundred acres, heavily timbered, section 16, township 18, range 9, have been given up by the Sandy Bay band. About 40 acres have been cleared, and of this, 14 are under cultivation. The land belongs to the school.

Buildings.—The school, a frame building on a solid stone foundation, 40 x 70 feet, comprises basement, three stories and attic. The basement contains bakery, pantry, kitchen, dining-rooms and laundry. On the ground floor are boys' play-room, chapel, sitting-room, class-rooms and a stock-room. On the first floor are infirmaries, nuns' quarters, sewing-room and the girls' play-room. On the second floor are dormitories. The attic contains two large water tanks for fire-protection and general purposes in connection with the plumbing system. In an annex to the basement is the acetylene gas plant and the gasoline engine used for pumping water and cutting wood. This annex is also used as a general workshop for mending shoes, carpenter-work and forging. Besides these buildings, there are two stables, a storehouse and a shed.

Accommodation.—There is accommodation for 50 boarding pupils and a staff of 10.

Attendance.—The attendance has been good enough. At the start, the enrolment was 31 pupils. During the year 4 were discharged and 12 admitted.

Class-room Work.—The pupils attend school twice daily, with the exception of the girls who assist in the sewing-room and kitchen, by turns. Besides the regular school hours they have study from five to six p.m. The pupils are graded as follows:—

	Pupils.
Standard I.	28
“ II.	5
“ III.	2
“ IV.	3
“ V.	1
Total.	39

Farm and Garden.—About 14 acres are under cultivation, 8 in oats, 4 in potatoes and 2 in gardening.

Industries Taught.—The principal occupations of the boys are: farming, gardening, sawing and splitting wood, milking and care of cattle. The girls receive instruction and practice in all lines of housework. This includes baking, cooking, washing, ironing, sewing, mending, knitting, milking and butter-making.

Moral and Religious Training.—Special attention is given to this important branch of education. Every day half an hour is devoted to Christian doctrine. Morning and evening prayers are attended in the chapel.

Health and Sanitation.—All the pupils have enjoyed good health throughout the year. The building is well ventilated, cleaned and no refuse is allowed to lie about the ground.

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Water Supply.—The water-supply is ample. It is taken from a well 53 feet deep. It is clear, pure and wholesome. There is also a large cistern for rain-water for the use of the laundry.

Fire Protection.—The department, through our inspector, Mr. Marlatt, has provided the school with ten 'Star' chemical fire-extinguishers. They are placed in convenient positions throughout the building. There is also hose connection on each floor with the tank in the attic. The means of entrance and exit are well planned and ample. We also have two fire-escapes.

Heating and Lighting.—The school is heated by steam, and lighted by acetylene gas.

Recreation.—Football, baseball, croquet and shooting with bows and arrows are the favourite pastimes of the boys. The girls also play football, and have different little games.

General Remarks.—It seems to me that the results of the year's work, with our pupils, are most encouraging. At the start, as the children were accustomed to follow their parents, constantly moving from place to place for hunting, trapping, digging senega-root, or getting work, it was hard to make many of them attend regularly. But with the effective assistance of our good agent, Mr. Logan, the attendance now is quite fair. I am pleased to thank Mr. Logan for the interest shown in our school.

I have, &c.,

G. LEONARD,

Principal.

PROVINCE OF MANITOBA,

BRANDON INDUSTRIAL SCHOOL,

BRANDON, July 2, 1906.

FRANK PEDLEY, Esq.,

Deputy Supt. General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my report of the Brandon industrial school for the fiscal year ended June 30, 1906.

Location.—The school is very conveniently situated about 3 miles northwest of the city of Brandon, on a natural terrace about half-way up the hill on the north side of the valley of the Assiniboine river. It commands a fine view of the valley, the Experimental Farm, and of the city and country to the south. The school is not situated on or near any reserve.

Land.—The land connected with the school contains 320 acres, being east half of section 28, township 10, range 19. It belongs to the school, and is well adapted for agriculture, garden and grazing purposes. That part of the half section lying in the valley, about 220 acres, is mostly of excellent soil, while the portion along the hillside is of somewhat lighter quality.

Buildings.—The main building, 102 feet frontage, brick veneered, originally T-shaped, is three stories high, with a two-story addition extending to the west across the rear. It contains officers' rooms, dormitories, school-rooms, dining-room, sewing-room, kitchen, laundry, sick-room, play-rooms, offices, &c. The other buildings are residences for the principal, farmer and gardener, barn and stables, piggeries, carpenter-shop, hennerly, ice-house and two root-houses. In addition to keeping all the buildings in a thorough state of repair, considerable painting and papering has been done to all the residences, and a new hennerly 65 feet long has been built with a commodious yard attached. The house formerly occupied by the gardener has been moved to the west

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of the main building and partially remodelled for a carpenter-shop. In the main building maple floors have been put down in the girls' play-room and hall, the pupils' dining-room, the kitchen and pantries. A new furnace has been put in, and the heating system considerably remodelled with hot-air registers in the walls instead of the floors, which is certainly more sanitary. The fire-protection has been made more efficient, and new blackboards put in the two school-rooms— in all 65 feet x 4 feet of hyloplate.

Accommodation.—There is accommodation for 125 pupils and the staff.

Attendance.—The average attendance for the year has been a little over 98.

Class-room Work.—The half-time system is followed except in the case of some of the smaller boys, who usually attend all day, especially during the winter. Under the two thoroughly qualified teachers who have had charge of the school work throughout the year most excellent results have been accomplished both in the amount and character of the work done. The authorized programme of studies is closely followed. The following is the grading of pupils at the close of the year:—

Standard I.	15
" II.	17
" III.	10
" IV.	13
" V.	8
	—
Total.	93

Farm and Garden.—Particular attention, under competent instructors, is given to these two departments, as the great hope of uplifting the Indian is to induce him to get his living from the soil; and so one object of the school is to familiarize the pupils with all the important operations in farming and gardening, and to show them the bountiful results obtained from labour expended along these lines. We have 166 acres under cultivation as follows: wheat, 48 acres; oats, $34\frac{3}{4}$ acres; barley, $5\frac{1}{4}$ acres; corn, 5 acres; potatoes, 10 acres; turnips, 3 acres; mangolds and beets, $2\frac{1}{4}$ acres; white carrots, $\frac{1}{2}$ acre; fruit bushes, $2\frac{1}{4}$ acres; garden, 3 acres; brome and rye grass, 20 acres; native grass, 9 acres, and summer fallow, $22\frac{1}{2}$ acres.

Last year all the crops were considerably over the average, and the prospects were never more promising than they are this year.

Industries Taught.—Besides farming and gardening, the boys are taught the care of stock, carpenter work and general repairs. The girls are taught general housework, cooking, sewing, washing and ironing, and dairying. In all the departments quality is looked after more carefully than quantity.

Moral and Religious Training.—Nearly all the boys and a considerable number of girls attend the Sunday morning service in the city of Brandon. In the afternoon they assemble in the Sabbath school, the pupils being organized into classes with different officers as teachers; and a short service is held in the evening. These Sunday services with daily Bible reading and prayer, and the good example of Christian officers have been productive of moral and religious elevation. Saturday afternoon is devoted to preparation for the Sabbath.

Health and Sanitation.—The general health of the pupils has been good. Two boys and four girls died during the year. There were two mild cases of measles. The duties of the medical attendant have been faithfully performed, and the sanitary condition and ventilation of the buildings carefully looked after.

Water Supply.—Water is supplied throughout the main building and to the principal's residence by a windmill from a never-failing well, and hot water from reservoirs connected with a heater in the basement and with the cooking range is supplied to the kitchen, laundry and bath-rooms.

Fire Protection.—In the main building stand pipes from the chemical engine and storage tanks reach all the flats, with which are connected hose of sufficient length to

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protect any part of the flat. Extinguishers, pails full of water, and axes are kept in convenient places, and fire-escapes from all the dormitories reach nearly to the ground.

Heating and Lighting.—Three large wood furnaces and two coal furnaces keep the main building quite comfortable even during the severest weather. All these furnaces are so installed that a large volume of pure fresh air from the outside is constantly flowing into the building; and three large shafts provide for the exit of the foul air. This gives an excellent system of ventilation. The main building, principal's residence and barn are lighted by electricity derived from Brandon.

Recreation.—In the winter football, skating and sleigh-riding are the principal outdoor amusements. In an intercollegiate competition the football team won a fine trophy, a silver cup, and the members were presented with medals by one of the leading merchants of Brandon. In the summer the games are more varied, including cricket, croquet, &c. The girls have a large play-room in which to amuse themselves in cold or stormy weather. During the winter months the pupils are given an evening each week for parlour and other games.

General Remarks.—During the year 11 pupils have been discharged, and 13 admitted. The work in all the departments has been very satisfactory. Many improvements have been made in the farm, garden, buildings and grounds; and two teams of young horses and new machinery have been purchased.

The most kindly feeling exists between officers and pupils. The pupils are contented, quite cleanly in their habits, and an air of cheerfulness pervades the whole institution. All the members of the staff are specially fitted for the work of their departments, and no effort is spared to make the institution home-like, to make the stay of the pupils enjoyable, and to help them to build up an all-round Christian character.

In closing this report, I wish to convey my thanks to the inspector, for his thorough and efficient inspection and audit; and to the officials of the Methodist Missionary Society, and the officials of the Indian Department for their uniform courtesy and kindly interest in the work of the school.

I have, &c.,

T. FERRIER,

Principal.

PROVINCE OF MANITOBA,

ELKHORN INDUSTRIAL SCHOOL,

ELKHORN, July 1, 1906.

FRANK PEDLEY, Esq.,

Deputy Supt. General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my annual report for the year ended June 30, 1906.

Location.—The new home, which we have now occupied since September 7, 1899, is situated about $\frac{1}{2}$ of a mile from the town of Elkhorn, and stands in about the centre of what was formerly known as the 'Gore,' a level piece of excellent turf some 42 acres in extent, bounded on the north by the Canadian Pacific railway main line, and on the south by a fence running along the public road allowance. West of this and immediately adjoining it lies our farm of about 300 acres, being the southwest quarter of section 4, and the southeast quarter of section 5, township 12, range 28, which contains excellent pasturage and wheat-land, in addition to which the department purchased 20 acres of good hay-land adjacent to the 'Gore,' all of which is owned by the Dominion government.

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Buildings.—These comprise the main building, the principal's residence, the laundry, the gymnasium, the latter containing the carpenter, paint and shoe-shops, having been fitted up in the month of August, 1900, horse and cow stables, root-house, coal-shed, boys' and girls' outhouses and implement-shed. There is also a small frame building covering the pump and sewage tank, with which is connected a windmill used in emptying the tank.

Accommodation.—There is accommodation for 100 pupils and 15 of a staff in the school.

Attendance.—There has been a considerable increase in the number of pupils in the school, the present attendance being 49 boys and 48 girls, total 97.

Class-room Work.—In spite of drawbacks owing to epidemic sickness and the inability of so many of the new pupils to understand English properly, the all-round progress in this department has been beyond expectation. The returns to date are:—

Standard I.	18
" II.	11
" III.	22
" IV.	27
" V.	6
" VI.	13

The annual June examinations constitute a very fair test of the work for the year. The subjects taken are writing, reading, spelling, arithmetic, grammar, composition, drawing, geography, literature and Canadian history. A very creditable showing was made by those who have attended during the whole year. In standard V, pupil No. 0-107, Julia Bear, was first, while the silver medal annually awarded to the highest pupil in standard VI was this year won by pupil No. 192, David Pruden.

In this connection I must express my appreciation of the painstaking efforts of the teacher, Miss Marks, the merit of whose work is best indicated by the results.

Farm and Garden.—The pupils in this department, the most important to the Indians, are instructed in the proper methods of cultivation of the soil, the use of implements and the care and handling of stock, &c. The annual returns show 1,200 bushels of wheat, 643 bushels of oats, 212 bushels of barley, 350 bushels of potatoes, 85 bushels of carrots, 40 bushels of beets, 175 bushels of mangolds, 600 bushels of turnips, besides onions, parsnips, cabbage, celery, &c., sufficient for the winter's use. Realizing the importance of a knowledge of gardening, further ground has been broken adjacent to the main building, so as to ensure more thorough instruction in this connection. This branch of the work is under the charge of the supervisor, together with the work in the flower gardens and grounds.

The five thousand trees set out in the past two years are doing excellently. Practically none of the maples have died, but in the very lightest soil a few of the ash did not survive the past winter, while the remainder appeared to have suffered from a late frost, but have now recovered. The elm and cottonwood have done equally well with the maples. A few trees were killed by fire which was set on adjacent lots for the purpose of burning off the weeds, but these were mostly replaced. This year about 2,000 more have been set out, and ground has been broken on both sides of the avenue for about 3,000 more next spring.

The general result in conjunction with the increased area of lawn and flower beds has been to enhance greatly the general appearance of the environs of the school.

Industries Taught.—For the boys, farming is of course the industry to which greatest importance is attached, but they are also instructed in carpentry, painting, plumbing, &c., and the care and use of tools, all the construction and repair work of the institution being accomplished by this department, including the running of the engine. Instruction is also given in harness-making, milling, blacksmithing and shoe-making. One blacksmith pupil discharged last fall was at once hired by the blacksmith in the town. Those of the boys too small to work at a trade do the necessary chores in

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and around the school, besides looking after the lawns, drives, flower beds, gardens and all the trees set out the past year or two.

The girls perform all the usual household duties and are instructed in sewing, knitting, cooking, washing, &c. All their uniforms and working clothes are made in the sewing department under the efficient instruction of Miss Cameron.

Religious and Moral Training.—Realizing as I do, that this is the most important feature of the system, the general effort is to maintain the high moral standard which at present obtains among the pupils of this school and to encourage a straightforward and high-minded disposition among the children entrusted to my charge. The very satisfactory behaviour throughout the school during the past twelve months is only a natural consequence of these endeavours, there having been scarcely any punishment.

Prayers are held daily, both morning and evening, when addresses are frequently given by visiting clergy and others, while on Sundays services are held twice daily at Saint Mark's church. Owing, however, to inadequate seating capacity in the church, only sixty per cent of the pupils have been able to attend, but now an extension is being built on, so that there will be accommodation for all.

Sunday school classes are held in the institution for the juniors, while the seniors attend at Saint Mark's for the purpose.

Health and Sanitation.—Apart from those cases of illness mentioned below, our standard is high. Only one death occurred during the year, when on January 22, we lost one of our brightest boys, No. 202, David Tatizoyhema, from heart disease. He had recovered from a very severe attack of pneumonia and was about among the boys when stricken, dying in a few hours.

On March 4, measles broke out, and we had 45 cases before the quarantine was finally raised. All recovered, though the outbreak was of a very virulent type, but traces were left in the shape of scrofula and tubercular swellings, &c. One case of chicken-pox also developed, but owing to rigid isolation, went no further. The characteristic pustule was so extensive and of such malignant exhibition that for a day or two it presented the appearance of small-pox, and precautions were taken accordingly. Several severe cases of pneumonia were also successfully treated. Beyond this there has been no serious illness during the year.

Drainage.—The drainage from bath-rooms, kitchen and laundry is conducted to a large tank at a considerable distance from the main building, whence it is pumped to a point well out on the open prairie.

The outhouses for males and females are erected at such distance from the main building as to obviate any danger of defective sanitation.

Water Supply.—The water throughout this district is of the best, but owing to a dry autumn and a deficient snowfall most of the wells around here went dry, and we had to dig a new well outside the building, of sufficient capacity, however, to put us beyond any possibility of similar shortage in the future. From this well the water is pumped to a tank at the top of the building by means of a Rider Ericsson hot air engine, each floor having service therefrom, while on the basement floor is a further attachment whereby the drains can be flushed from the tank or pump at will.

Fire Protection.—The school is furnished with the McRobie fire-extinguisher in the basement, with connections and hose on all floors, also two Babcock and six Stempel machines, the latter conveniently placed throughout the building, while each dormitory has a fire-axe handy. The system was recently inspected and was found to be in good order.

Heating and Lighting.—The heating is done with hot water, and last summer was installed a new heating plant with a 12-foot tubular boiler transmitting the water to radiators instead of coils.

The lighting is done at present with ordinary coal-oil lamps, but we are still hoping for the early installation of an acetylene gas plant so as to obviate the inconvenience, anxiety and extreme danger of the present system.

Recreation.—Football always has been and still is our principal game, together with baseball and the other usual school boy games, which are all encouraged as much

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as possible in the proper hours, and a good ground has been set aside for this purpose. For the boys in winter there is a gymnasium fitted up, which is warmed by a wood stove; while the girls have their play-room in the main building.

An excellent tennis court is also available for both sexes, while the girls have their own swings, football and other amusements. After work in the summer the girls are frequently taken for walks by one or other of the lady members of the staff.

Band.—There is no regular band instructor at present, but the band maintains its efficiency under the leadership of one of the senior boys. It has already filled several engagements out of town, and has arranged to visit other towns during the coming month. At the request of the mayor and council they also play two evenings weekly in the town, where a band-stand has been specially erected for them.

General Remarks.—On July 22, the assistant commissioner paid us a short visit, leaving for Winnipeg the same day.

I accompanied him as far as Portage la Prairie on my way to Fairford, the Pas and the neighbouring reserves, whence I returned on September 22, with 25 pupils, after a very successful trip.

I regret to say that during my absence it pleased God to take to Himself our only little boy, to the very great grief of Mrs. Wilson and myself.

On September 24 we had the pleasure of a visit from our commissioner, the Honourable David Laird, who spent a day with us.

He made a brief inspection of the school, and after speaking a few words of encouragement and advice to the children he presented the silver medal won by her in July last to No. O.110, Sarah Cook, whose father, Chief Cook, of the Pas, was also present.

On October 30, we were visited by His Grace the Archbishop of Rupert's Land, who held a confirmation at Saint Mark's church, when 10 of our pupils were candidates.

He subsequently visited the school and gave a short address to the children after prayers. Before leaving he wrote as follows:—

‘It has been a very great pleasure to me to visit the school and to address the pupils. I feel that a good work is being done.’

On January 9, Principal Thompson, of the Middle Church industrial school, arrived here with one teacher and 44 pupils from that school, which had just previously been destroyed by fire.

We also had a visit on May 17 from His Lordship the Bishop of Selkirk and Yukon, who went through the school and subsequently held a short service for us. He was much pleased and wrote in the visitors' register:—

‘For many years I have been interested in work among the Indians, and it is with no small pleasure that I am able to say, after visiting the Elkhorn industrial school, that I have not seen anything so near the ideal in management, discipline and general efficiency. It has been a great pleasure to meet the staff and the pupils and to note the feeling of hope and ambition that seems common among the latter. Through such institutions generously supported much may be done for the uplifting of the natives of our land. May this school prosper more and more.’

On May 28, Mr. W. F. Bredin, M.P.P. for Athabasca, went all through the institution and subsequently remarked as follows:—

‘After fifteen years' experience in a business way with Indians, I am pleased to say that the Elkhorn industrial school meets my views as to what an educational institution should be for Indian children.’

We were also visited by a committee from the Women's Foreign Missionary Society, the Ven. Archdeacon Phair, the superintendent of Indian missions, Mr. J. E. Brown, M.P., Mr. T. C. Norris, M.P.P., and many others, who expressed their extreme satisfaction with all they saw.

I should like to express my appreciation of the manner in which those members of my staff who have been with me during the past year have worked so diligently and

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faithfully in seconding my efforts for the welfare of the school and the pupils under my charge.

I would add, in conclusion, that I feel greatly encouraged by the success of so many of my late pupils in their respective callings, and I cannot but feel that the education of the Indian along the lines followed out here is productive of good results.

That it should be so in every case is beyond expectation, but judging from reports and correspondence the issues are most gratifying to myself and every one interested. I feel that God's blessing is on our work, and as time goes on I hope and believe that still greater progress will be made.

I have, &c.,

A. E. WILSON,

Principal.

PROVINCE OF MANITOBA,

RUPERT'S LAND INDUSTRIAL SCHOOL,

MIDDLE CHURCH, July 2, 1906.

FRANK PEDLEY, Esq.,

Deputy Supt. General of Indian Affairs,
Ottawa.

SIR.—I have the honour to submit this my fourth annual report on the affairs of the Rupert's Land industrial school for the year ended June 30, 1906.

Location.—The school, or what at the present time remains of it, is situated on the bank of the Red river, 7 miles north on the main road from Winnipeg to Selkirk. It is also on the line of the Canadian Pacific railway and the Winnipeg-Selkirk and Lake Winnipeg Electric railway.

Land.—The farm consists of lot 18, in the parish of St. Paul, in which there is over 375 acres, part of which is nicely situated.

Buildings.—They consist at present of the principal's residence, laundry, carpenter-shop, granary, horse-stable, coal-shed, blacksmith-shop and ice-house, sewing-room and tailor-shop, engine-house, farmer's residence, cattle-stable, root-house and granary and implement-shed and piggery.

On January 4, last, we had the misfortune to have a fire, which started in the recreation-hall, under the class-rooms, the building being 60 x 30 feet, of frame construction, and at one end only 20 feet from the main building; both buildings, along with the printing office, were burned down, nothing being left but the walls of the main building, most of the contents of which were saved. When the fire took place, there were 32 boys and 29 girls in the school, the rest being absent on holidays. No lives were lost and no person injured.

Accommodation.—The school had accommodation for 60 boys and 50 girls, besides 10 of a staff.

Attendance.—At the time of the fire there were 39 boys and 33 girls on the roll, with 32 boys and 29 girls in attendance; 22 boys and 22 girls were taken to the Elkhorn school, 4 boys and 2 girls sent to their homes in St. Peters, 2 boys sent to the hospital in St. Boniface and 1 girl sent to the hospital in Dynevor; 2 boys were discharged and places provided for them with farmers in the parish, and 3 girls were found places as domestics in Winnipeg, 2 boys and 2 girls remaining at the school to assist with the farm work. The latter 4 are still at the school at this date.

Class-room Work.—This work has been in charge of two teachers; a male teacher holding a first-class certificate in charge of the senior pupils, and the governess in

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charge of the junior. The pupils attended the class-room half a day and worked the other half. The grading of the pupils at the end of the year was as follows:—

	Boys.	Girls.
Standard I.	6	6
“ II.	15	9
“ III.	9	13
“ IV.	7	3
“ V.	2	2

Farm and Garden.—There is about 30 acres in oats, 30 acres in barley, over 6 acres in potatoes and about 2 acres in garden and field vegetables, and about 14 acres seeded to grass, timothy and clover. Last year, owing to the rain, we were not able to get in as much crop as we wished, having only about half a crop, threshing about 1,100 bushels of oats and barley. We had about 1,300 bushels of potatoes and roots, besides cabbage and other vegetables.

Live Stock.—At the present time we have 15 head of stock, most of it young, and 5 horses.

Industries.—The boys were taught farming, gardening and the care of stock, also the use of all kinds of tools. The girls were taught housework in all its branches, cooking, baking, butter-making, sewing, knitting and fancy-work.

Moral and Religious Training.—Prayers were held night and morning, services in the parish church attended twice every Sunday and mid-week service in the school every Wednesday evening conducted by the pastor of the parish, and Sabbath school in the institution every Sunday afternoon.

Health and Sanitation.—The health of the pupils previously to the fire was good.

Water Supply.—The water for the use of the institution was supplied from two wells in the main yard.

Fire Protection.—Since the fire there is none.

Heating and Lighting.—The main building up to the middle of November was heated by hot-air, when a new steam-heating apparatus was completed, which was giving most excellent satisfaction and which was making a saving of at least 50 per cent in the cost of heating the main building. The principal's residence is heated by hot water and the other buildings with stoves. The buildings were, previously to the fire, all lighted by electricity, with a ten horse-power gasoline engine and a hundred-light dynamo.

Recreation.—All kinds of outdoor games were indulged in during the summer, with basket-ball, military drill and calisthenics during the winter months.

General Remarks.—In conclusion, I would say that at the time of the fire everything was in good order and running smoothly. The sanitary and heating arrangements had been put in splendid condition. The children were doing well; the parents were pleased with the progress their children were making, and applications were being received nearly every week for admission, and we were looking forward to the school having its full complement of pupils by the coming fall; but Providence ruled otherwise and we must submit to His ruling.

I have, &c.,

J. THOMPSON,

Principal.

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MANITOBA SUPERINTENDENCY,
LAKE WINNIPEG AND RAT PORTAGE INSPECTORATE,
STONEWALL, MAN., June 30, 1906.

FRANK PEDLEY, Esq.,
Deputy Supt. General of Indian Affairs,
Ottawa.

SIR,—I have the honour to transmit a report showing the state of the schools which I have visited and examined during the year.

Owing to the illness and subsequent resignation of Neil Gilmour, Indian agent at Norway House, a good deal of the work of that agency, and particularly the payment of annuities, has devolved upon me, so that I have not been able to spend the time necessary in visiting all the schools of the inspectorate.

FORT FRANCES AGENCY.

FORT FRANCES BOARDING SCHOOL.

This school was visited June 20. The inspector was accompanied by Agent Wright. I found 16 boys and 14 girls present at the time of my visit. Pupils were classified as follows:—

	Pupils.
Standard I.	20
“ II.	10
Total.	30

This school is called the Fort Frances boarding school, but it is in reality a distance of 3 miles from the town. It is 1 mile from Pither’s Point, on the Rainy river, and immediately adjacent to the Couchiching reserve.

I found the scholars were not able to speak English to any extent, yet the advanced class did very well in reading and spelling. They were certainly orderly, and anxious to do their best. The school is so new that organization is not yet complete; but the work done was very creditable, alike to teachers and pupils.

The meals served were of the best quality, and the cooking was excellent. The children were very tidily dressed, and everything was both new and clean.

Nothing that I have ever seen is more effective or more economical than the heating plant which has been installed here.

The water-supply is drawn from the Rainy lake by a gasoline engine. The pressure is about 17 pounds to the square inch. The quality of the water can hardly be surpassed. There are 2,000 gallons stored for emergencies.

The school is well supplied with hose; and other arrangements for fighting fire are most complete.

There are two most perfect fire-escapes, one at each end of the school.

The light used is produced from carbide of calcium. The generator is in a separate building, and pipes are laid to every room in the house.

The main building is three stories high, with stone basement. The superstructure is of frame, painted white. The size of the building is 70 x 40 feet. The excellence of the stonework reflects great credit on the workmen employed.

Very little can be said of work actually done. The school is too new for that. Yet I found everything in most excellent condition for work. I am convinced that a good record will be made during the coming year.

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MANITOU DAY SCHOOL.

This school has been closed for some time owing to the lack of a teacher. I visited it on June 22, and held a council with the Indian chief in regard to this work. He claimed that while they were anxious as a band to have their children educated, they were not willing that the children should receive religious instruction. This seems to have been the point in dispute between the parents and the last teacher, and will always be a source of irritation with these pagan people.

LONG SAULT RAPIDS DAY SCHOOL.

This school was visited on June 23. The inspector was accompanied by Mr. John Lyons, of Fort Frances.

The teacher in charge of this school is Miss Beatrice Johnson, daughter of the resident missionary, who appears to be doing very excellent work. The average attendance is 9. Most of the children are in standard I, but a number of them can both read and write well. The work that is being done here appears to be quite satisfactory to the Indian parents, but no special effort is being made by them to encourage regular attendance.

KENORA AGENCY.

CECILIA JEFFREY BOARDING SCHOOL.

This school was inspected twice during the year, first on October 12, 1905, and again on June 13, 1906.

I found 40 treaty children on the roll, and 5 non-treaty children, making a total of 45. These children were classified as follows:—

	Boys.	Girls.
Standard I.	18	13
“ II.	3	4
“ III.	4	2
“ IV.	0	1

This school has been named the Cecilia Jeffrey boarding school in honour of a distinguished patron now deceased. It is situated on the western side of Shoal lake, Ontario. This lake is an arm of the Lake of the Woods, situate at the northwest corner.

I was greatly pleased with the reading and writing done at the school. The enunciation of English words was very clear. They pay attention to punctuation, and are able to convey the sense to one who is listening. The spelling of the older scholars was also good, and some of the copy-books would have done credit to a school for white children.

Pupils of this school have won a name for good behaviour and politeness, both at home and abroad.

There have been no sick children in the school for a long time; there is no scrofula, and they have no epidemics.

Food and clothing are of excellent quality, and the heating and water-supply are well arranged. Fire appliances are good, but the accommodation is limited. Drainage and ventilation are excellent, and the buildings are in good repair.

Persistent effort is made to impress upon the minds of the children ideals of truth, honour, obedience and honesty. The effect of this upon the subsequent lives of the children cannot be over-estimated.

The school is very popular with the Indian people, and the teachers are very highly respected.

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KENORA BOARDING SCHOOL.

This school has been visited twice during the year; first on October 18, 1905, and again on June 14, 1906.

The school is in charge of Father Kalmes, who, with an able staff of assistants, is doing a good work. I found 30 pupils in attendance, graded as follows:—

	Boys.	Girls.
Standard I.	3	6
“ II.	6	2
“ III.	3	5
“ IV.	3	2

The school is situated about 2 miles south of Kenora, on the Lake of the Woods. The grounds consist of about 20 acres, 11 of which are in a high state of cultivation.

The scholars of this school pleased me greatly. The copy-books were marvels of neatness. The drawing exercises were very good indeed. The reading and spelling were excellent. The demeanour of the whole school was beyond criticism. English is spoken by every scholar. Discipline was very good.

The people of the neighbourhood speak in the most complimentary manner of the general behaviour of the pupils of this school. They are polite, honest and well-behaved.

Water-supply is very inadequate and the fire-appliances are poor. Fire-escapes are being constructed and will be of very great advantage.

Drainage is very excellent, but ventilation is rather inadequate. The need of more room is very much felt.

All the buildings inspected were in a fair state of repair, and several important additions have been made during the year.

Great credit must be given for the amount of land reclaimed during the past season. Much hard work has been done and the gardens, fields and crops are a credit to the school.

ASSABASCA DAY SCHOOL.

This school was visited on June 9, and was found to be closed. Indeed it had been closed for the greater part of a year, since the retirement of the late teacher, Joseph Dargue.

I consulted the chief in regard to the continuance of the school, and he spoke in a very indifferent manner with regard to it. His statement in effect was, that if we wished to send a teacher, he would be quite agreed, and would do what he could to induce the parents to send their children, but he had no special request to make in that direction.

ISLINGTON DAY SCHOOL.

This school was also closed at the time of my visit. The Rev. Mr. Wood, who had been in charge thereof, having failed to give satisfaction to the parents of the children, had moved away, and no new appointment seemed to be in prospect. The Indians here were also very indifferent as to whether they had a teacher or not.

NORWAY HOUSE AGENCY.

BLACK RIVER DAY SCHOOL.

This school was visited August 17, and was closed for holidays, so that no inspection could take place.

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HOLLOWWATER RIVER DAY SCHOOL.

Inspection was made at this school July 18. The inspector was accompanied by Mr. P. H. Sutherland. The number of children found present were 13; boys, 9, and girls, 4. The average attendance for three months was 5.34. The children were graded as follows:—

	Pupils.
Standard I.	5
“ II.	4
“ III.	4

Punctuality was very poor. Class organization was good. Furniture was well taken care of. The school-house was neat and clean. But general interest in the school was at very low ebb. John Sinclair, the native teacher, seemed to be very faithful in his work.

BLOODVEIN RIVER DAY SCHOOL.

School visited August 20. Owing to lack of interest on the part of the parents and lack of thoroughness on the part of the teacher, it was deemed advisable to close this school last winter, and it remained closed up to the time of our visit. I do not see at present any reason for re-opening.

FISHER RIVER DAY SCHOOL.

This school was visited on July 23. Number in attendance, 26—16 boys and 10 girls.

There was no record of standing in the teacher's register.

The present teacher, Isaiah B. Jones, had just arrived at the time of my visit, and had not been able to classify the scholars.

Punctuality was reported to be very poor, and all other conditions of school life seemed to me to be very indifferent. We shall hope for better success when the present teacher has really commenced his work.

JACKHEAD RIVER DAY SCHOOL.

This school was visited July 26. School has not been opened since March. The attendance has been irregular and unsatisfactory. School closed at the time of visit.

BERENS RIVER DAY SCHOOL.

This school was also closed at the time when I was prepared to make an inspection, and I had no access to the books and records.

Miss Showler, the teacher, is well spoken of both by the Indians and the church authorities, and every satisfaction was expressed by the chief and councillors of the band.

POPLAR RIVER DAY SCHOOL.

No school has been held here since May 16, and the teacher is absent on holiday, so that no inspection could be made.

ROSSVILLE DAY SCHOOL.

Inspection was made August 10. There were 12 present—4 boys and 8 girls.

The school was in charge of Elizabeth Ann Armstrong, who holds a second-class Nova Scotia certificate.

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The examination of the scholars reflected credit both upon them and upon their teacher. Class organization was good; care of material was good, and the conduct of the pupils well reported of.

CROSS LAKE DAY SCHOOL.

This school has had no regular teacher for a long time, and has been allowed to run down. Miss Annie Foster has just been appointed, and appears to have started her work with great earnestness.

The children are graded as follows:—

	Pupils.
Standard I.	19
“ II.	5
“ III.	4

GRAND RAPIDS DAY SCHOOL, SASKATCHEWAN.

Owing to the departure of the Rev. Mr. Brown and his wife, the latter of whom was the teacher of this school, no inspection could be made. The time of my visit was August 13. I was accompanied by Mr. P. H. Sutherland.

LITTLE GRAND RAPIDS DAY SCHOOL, MANITOBA.

This school was visited August 22. Twenty-three children were found to be present—10 boys and 13 girls.

These were all beginners, and so were classed as standard I. The Rev. Mr. Ivens is in charge of the school during the summer months, but owing to the migratory habits of the people the work ceases as soon as the cold weather begins. The pupils showed good mental work, but have not yet become accustomed to the use of books and slates.

A new school-house is being built, and I have great hopes that a good work has been begun here.

CLANDEBOYE AGENCY.

FORT ALEXANDER BOARDING SCHOOL.

This school was inspected January 25, 1906. It was in charge of Rev. Father Vales, O.M.I., and an efficient staff of assistants. Two teachers are in charge of the school.

The number of pupils found in attendance was 45; of these, 24 were boys and 21 were girls; 19 of the boys were children of treaty Indians and 5 were non-treaty; 17 of the girls belonged to treaty and 4 were non-treaty.

The pupils were classified as follows:—

	Boys.	Girls.
Standard I.	20	10
“ II.	2	7
“ III.	0	2
“ IV.	1	2
“ V.	1	0

This school is beautifully situated on the bank of the Winnipeg river, on lot 60 of the Fort Alexander reserve. The building has been placed about 400 feet from the margin of the river, and commands a beautiful view thereof.

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Some of the children read and spell fairly. The copy-books are neatly kept. Their progress in arithmetic was scarcely perceptible. The knowledge of English was very limited; and the very best of discipline seemed to prevail. The health of the children was extremely good. They were well fed and well clothed.

The building was heated with steam, and the water-supply is ample for all purposes. There are a few fire-extinguishers hung at different parts of the building, but I cannot set much value upon the fire-appliances available.

Ample accommodation has been provided for 56 pupils.

The drainage is perfect, but the ventilation is not good. The whole building is lighted by acetylene gas, and a very good light is obtained.

The size of the building is 70 x 40 feet. The basement is of stone surmounted by a superstructure of frame three stories in height. This is painted white, and presents a very fine appearance.

The building throughout was as clean and tidy as any school that I visited. Everything was kept in excellent order. The children appear to be very happy.

FORT ALEXANDER DAY SCHOOL.

This school was inspected in January, and there were present at the time of my visit 12 boys and 6 girls. The number of pupils on the roll was 28, graded as follows:—

	Pupils.
Standard I.	21
“ II.	7

The teacher is Miss Sophia Spence, who has had twelve years of training in the Rupert's Land industrial school. She is a fine writer, a fair scholar, and is very much interested in her work.

The school-house is in good repair, size 21 x 27 feet and 10 feet high.

Punctuality has been fair; classes properly organized; material well cared for; school-house clean; pupils' faces and hands were clean, and the conduct of the pupils was well reported of both in and out of school.

The average attendance for the three months prior to my inspection was 15. There was some irregularity in the attendance, owing for the most part to the fact that the children have to cross a large river in coming to the school, which is an impossibility during rough weather.

BROKENTHEAD RIVER DAY SCHOOL.

Inspection of this school was made in January. The inspector was accompanied by Mrs. R. E. Coates, wife of the resident missionary, who is at present in charge of the school.

The number of children present during inspection was 10 boys and 5 girls, making a total of 15. They were classed as follows:—

	Pupils.
Standard I.	10
“ II.	5

The whole number on the roll was 23 and the average attendance for three months was 15.

The building has been repaired during the year. A new floor has been laid. A new platform has been put in for the teacher's desk. A new stairs has been built leading to the loft, and the school is much more comfortable than it was formerly.

This school has had no regular teacher for some time. The former appointee was not efficient. A duly qualified teacher has been engaged and will arrive shortly, and then we may look for a decided improvement.

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Punctuality has been poor, classes indifferently organized, material well cared for, school-house clean.

Much credit is due to Mr. and Mrs. Coates, the missionary and his wife, for keeping the school going during the absence of a teacher.

General Remarks.—My experience in the four boarding schools so far inspected has convinced me that this class of institution on the reserve itself is far superior to the day school, and is better for all practical purposes than the industrial schools.

I have, &c.,

JOHN SEMMENS,

Inspector of Indian Agencies.

MANITOBA SUPERINTENDENCY,

LAKE MANITOBA INSPECTORATE,

PORTAGE LA PRAIRIE, June 30, 1906.

FRANK PEDLEY, Esq.,

Deputy Supt. General of Indian Affairs,

Ottawa.

SIR,—I have the honour to submit the following report of my inspection of the industrial and boarding schools in my inspectorate.

BRANDON INDUSTRIAL SCHOOL (METHODIST).

Inspected March, 1906.

Number of pupils enrolled, 91, being 8 less than previous inspection.

Staff: principal, Rev. T. Ferrier; assistant principal, Mr. C. J. Sproule; matron, Miss M. Sutherland; assistant matron, Miss M. Hunter; farmer, Mr. J. G. Milne; gardener, Mr. H. Goodland; carpenter, Mr. J. Jones; senior teacher, Miss E. Brundridge; junior teacher, Miss M. Howard; laundress, Mrs. E. Burdette; seamstress, Miss C. Trumbell; cook, Miss E. Montgomery.

I am pleased to report a continuation of the excellent work of this institution. Mr. Ferrier, as principal, is master of every detail, and is strongly supported by a capable and loyal staff.

An improvement is noticeable in the class-room work; this branch I had occasion to notice in my last report. In the trades and labour departments the training is thorough, and so arranged that the graduating pupil is well qualified to take up successfully the battle of life.

The girls under the capable management of the matron are thoroughly drilled in all lines of domestic work that are likely to be useful to them in after life. The boys under trained instructors receive all the instruction that it is possible to give them, up to the age of discharge, in farming, care of stock, and the common trades. Special attention is given to farming and stock-raising.

The buildings are in fair repair. I have made some recommendations to the Indian commissioner with reference to some minor repairs.

The institution is out of debt, with a small balance on hand. Owing to a shortage in the number of pupils during the year, the church has had to supplement the departmental grant by several hundred dollars; with a full quota of pupils this would not have been necessary.

The general health has been good. I found two pupils suffering from the dreaded disease, tuberculosis; these I am sorry to report have since died.

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ELKHORN INDUSTRIAL SCHOOL (UNDENOMINATIONAL).

Inspected May, 1906. This school is operated entirely by the department. Enrolment, 111; boys, 60, girls, 51. Actual attendance at time of inspection, 103; boys, 55, girls, 48.

Staff: principal, Mr. A. E. Wilson; assistant principal, Mrs. Wilson; farmer, Mr. T. T. Smith; supervisor, Mr. L. Ingram; matron, Miss E. M. Vidal; teacher, Miss A. M. Marks; assistant teacher, Miss A. E. Cree; carpenter, Mr. James Goldie; seamstress, Miss J. Cameron; physician, R. Goodwin, M.D.

The school has now the largest enrolment of pupils since coming under departmental control. About 40 pupils were sent up from the Rupert's Land school after the destruction of that institution by fire.

Regarding the work of the school, the class-room work is of a high order, and second to none in this inspectorate. The industrial training for both boys and girls is similar to that given in other institutions of the kind.

The buildings are in a fair state of repair. Considerable trouble is caused by the sewage. I have made a report to the Indian commissioner on this subject. The heating plant recently installed did not give good satisfaction last winter. I understand that the contractor intends to remedy the defects. As the attendance is now so large it is anticipated that the per capita cost will be much reduced next year. The results from last year's farming operations were fairly satisfactory as regards the returns.

With the exception of an epidemic of measles during the winter, the general health has been good.

The school has now a large recruiting ground, and there should be but little trouble in obtaining a full quota of pupils.

BIRTLE BOARDING SCHOOL (PRESBYTERIAN).

Inspected January, 1906. Enrolment, 45; boys, 20, girls, 25.

Classification:—

	Pupils.
Standard I.	14
“ II.	8
“ III.	10
“ IV.	13

Staff: principal, Rev. W. W. McLaren; matron, Miss A. McLaren; assistant matron, Miss T. McLeod; second assistant matron, Miss L. Schwahn; teacher, Miss E. McGregor; farmer (temporary), Alex. Forsyth.

I am pleased to report that Mr. McLaren, as principal, appears to be exceedingly well qualified for the position. He is ably supported by a zealous and intelligent staff. The quality of the pupils turned out from this school, from a moral and intellectual standpoint, is high. After leaving school they are not lost sight of, but are advised and encouraged on all occasions, with the result that wherever I find ex-pupils of Birtle they are, with one or two exceptions, doing well, and a credit to the institution that gave them their training.

In industrial pursuits it has not the facilities of the industrial schools for the training of boys, but for girls it is equal to any. During the year ended December 31, last, the school received departmental aid to the extent of \$3,316.10, and from the Foreign Missionary Society of the church, \$2,594; of this latter amount, \$615 was in the shape of a loan. In addition to this the society donated clothing to the estimated value of \$800.

At the end of the year there was an overdraft at the bank of \$138.37, with all accounts paid. This with the loan before mentioned makes the indebtedness of the institution \$753.37. In fairness to the principal I should mention that the deficit was made by his predecessor. It is expected that the greater part of the debt will be paid

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off this year. The building is not in very good repair, but it is the intention to improve it this summer.

PORTAGE LA PRAIRIE BOARDING SCHOOL (PRESBYTERIAN).

Enrolment, 26; boys, 10, girls, 16. Departmental grant for 25 pupils on a per capita basis of \$72 per annum.

The staff consists of: principal, Mr. W. A. Hendry; matron, Mrs. Hendry; assistant matron, Miss Hendry.

In addition to his duties as principal, Mr. Hendry acts as teacher. The classroom work is very satisfactory. Owing to the school being situated in the town, there is not the same chance for industrial training as at most of the other schools. The lack of land prevents anything but gardening on a small scale. As a feeder for the industrial school, it is all that can be desired. It is unfortunate that there was not more land in connection, as the staff is capable of imparting a much more extensive training.

Mr. Hendry is a master of finance, and always keeps the expenditure within the income. In this respect, as for several other important reasons, he would make an excellent head for a much more extensive institution.

The building is frame, on a stone foundation, and is in fair repair. The heating is by hot air, has electric light, and is under the town fire-protection.

General health has been only fair. There have been two or three cases of tuberculosis and several cases of measles.

The per capita grant is from the Sioux vote, as the school was originally intended only for children of that tribe. Of late years quite a number of Saukteaux have been admitted.

As I have not inspected the boarding schools at Sandy Bay and Pine Creek, nor any of the day schools, since making my report in September last, I am not in a position to report on them at present.

I have, &c.,

S. R. MARLATT,

Inspector of Indian Agencies.

PROVINCE OF SASKATCHEWAN,

COWESSESS BOARDING SCHOOL,

BROADVIEW, SASK., June 30, 1906.

FRANK PEDLEY, Esq.,

Deputy Supt. General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my annual report on the Cowessess boarding school for the fiscal year ended June 30, 1906.

Location.—The Cowessess boarding school is situated in the Qu'Appelle valley, south of Crooked lake, on Cowessess reserve.

Land.—There are 40 acres of land which have been surrendered by this band for the use of the Roman Catholic mission.

Buildings.—The buildings at present in use are as follows: the priest's house, 30 x 20 feet; the church, 62 x 20; a house, 20 x 20, exclusively reserved for the Indians; an ice-house, 12 x 14 feet; a stable, 65 x 20; and a general workshop, 30 x 20 feet. The main edifice with the institute proper is a three-story building; its dimensions are 58 x 38 feet, and the height from the ground to the top roof is 52 feet.

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The basement contains two dining-rooms, a kitchen, a pantry, a dairy-room, a bake-room, a laundry with large boiler and power washing machine, and rain-water tank.

On the first floor are the entrance, the parlours, the chapel, the girls' play-room, 24 x 12 feet, the school-room, 26 x 15 feet 3 inches, and the boys' play-room, 32 x 14 feet.

On the second floor are situated the sewing-room, the nuns' quarters, and two sick-rooms, one for the boys and one for the girls.

On the third floor are two large dormitories, 35 x 23 feet, their height being 12 feet 6 inches. The garret contains a large water-tank.

The workshop is a two-story building on a stone foundation.

The first story comprises a carpenter's department, which is provided with all the latest wood-working tools, viz., a buzz-planer, a circular-saw table, a wood-turning lathe, a band-saw, an emery-wheel for grinding tools, and an improved wood lathe.

On the upper floor we have organized a small shoe-shop department, for the purpose of teaching our young boys all the necessary manual work. A few of the big boys repaired their own shoes quite satisfactorily.

Accommodation.—Under present arrangements there is accommodation for 65 pupils, and a staff of 8.

Attendance.—The pupils being all boarders, the attendance is very regular.

Class-room Work.—The programme of studies prescribed by the department is followed as closely as possible under the circumstances. The subjects taught are religious instruction, grammar, drawing, spelling, arithmetic, history and geography, but especial attention is given to reading and writing. The progress is encouraging. English is generally spoken, and is now quite familiar to all the pupils.

Farm and Garden.—There are about 100 acres under cultivation this year. We have also a garden in which is raised a full supply of potatoes and other vegetables for the use of the school. The farm and the garden give the children a healthy occupation.

Industrial Work.—Our pupils have special hours each day for manual work. The boys are kept working according to their age; they help in all kinds of farm and garden work, care of stock, cutting and sawing of wood. The girls are taught sewing, knitting, cooking, baking, butter-making; in fact, general housework, without neglecting to keep in order their recreation-room and dormitory.

Moral and Religious Training.—Particular attention is given to this important branch of education. Religious instruction for a short time is given daily on some practical subject, also on order, cleanliness, politeness and obedience, after which hymns are sung. The character of each pupil is cultivated with care.

Health and Sanitation.—The sanitary condition of the school, owing to the excellence of our fresh air, our drains, and the abundance of light, is very good, and the general health of the pupils is a surprise to visitors. Frequent baths are taken, and the premises are always kept in perfect order.

Water Supply.—Our water-supply is taken from a well in the basement. Although we have all the water necessary for ordinary purposes, still in order always to have an unlimited supply on hand, to be ready for fire, the well should be deepened. The water is of fair quality.

Fire Protection.—Fire-protection is abundantly provided for by means of a gasoline engine and force-pump of 100 gallons capacity per minute, connected by a 2-inch stand-pipe with a tank in the attic, which tank can be shut off by one pull of a lever; and the water is then pumped direct into the stand-pipe, maintaining a pressure of 100 pounds on a 1½-inch hose with ¾-inch nozzle. These connections are placed in each dormitory and in each hall; also one in basement and one outside of the building. The pump and engine are used to raise the water required to fill the tank in the attic; from the tank it flows through a stand-pipe to the plumbing system, which is consequently always ready for use. The engine is started by an electric

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spark, and a stream can be playing on the fire in ten seconds. The engine is also provided with tube ignition; and should a fire start in such a place that the engine could not be operated, we should still have the water pressure from the tank on the hose all the time, which pressure amounts to 23 pounds in the basement. The pump is provided with a safety-valve to prevent breakage. Besides, we have two Babcock extinguishers in a convenient place, and also a dozen fire-buckets hung up throughout the different rooms. I regret to say, however, that we have not been able as yet to provide the building with fire-escapes.

Heating and Lighting.—The building is heated entirely by two hot-air 'New Idea' furnaces. An abundant supply of pure air is constantly admitted to replace the foul air that leaves by the ventilators which are placed in the dormitories and halls.

The school is lighted throughout by acetylene gas, the machine being kept in a properly ventilated room by itself. No lighted lamps are allowed inside, and matches are placed under the control of the attendants. Furthermore, a new system of generator adapted to the acetylene machine by Rev. Brother Eugene has greatly improved its working.

Recreation.—During summer, football, swimming, fishing, and shooting with bows and arrows, and in winter skating, singing, playing cards, marbles and checkers are the favourite pastimes of our boys. The girls amuse themselves with drawing-slates, the dressing of dolls, singing, skipping and croquet.

General Remarks.—I wish to express my gratitude to the department for making arrangements in order to have two of our pupils, who are affected with scrofula, treated at the Indian Head hospital.

Our agent, Mr. Millar, deserves special thanks also for his courtesy towards the staff of the school and his kindness to the pupils. He has sent them several presents during the year, and on each of his monthly visits he expresses his satisfaction in such a way as to make them long to see him again.

I have, &c.,

S. PERRAULT, O.M.I.,

Principal.

PROVINCE OF SASKATCHEWAN,

CROWSTAND BOARDING SCHOOL,

KAMSACK, SASK., July 3, 1906.

FRANK PEDLEY, Esq.,

Deputy Supt. General of Indian Affairs,
Ottawa.

SIR.—I have the honour to submit my annual report for the Crowstand boarding school for the year ended June 30, 1906.

Location.—The school is situated on Cote's reserve, on the main line of the Canadian Northern railway, $3\frac{1}{2}$ miles from the town of Kamsack.

Land.—The land consists of the fractional south half of section 19, township 29, range 31, west of the 1st principal meridian, and a fraction of the southeast quarter, section 24, township 29, range 32. In all there is about 379 acres. This land is the property of the Presbyterian Church in Canada, and was acquired part by free grant and part was purchased. It is well suited for mixed farming.

Buildings.—The buildings consist of the main school, a frame building, 94 x 38 feet, and two stories high, besides the basement. To this is attached a wing, 46 x 16 feet, also two stories high. The other buildings are the principal's residence, stone

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milk-house and ice-house, a frame shop, frame stables and implement-shed, and two small log stables. During the year a frame granary, 30 x 20 feet, was built.

Accommodation.—There is ample room for a staff of 6 or 7 persons and 55 pupils.

Attendance.—At the beginning of the year there were 48 names on the roll. During the year there were 3 deaths and 2 discharges. During the same time there were 5 admissions, leaving the number still 48.

Class-room.—With but a few exceptions the pupils have shown a growing interest in their class-room work. Quarterly examinations are held, and considerable effort is shown to secure a good standing in this test.

Farm and Garden.—The cut-worms did much harm last year to our garden, but the plants left untouched gave a good return. Our wheat yielded 35 bushels or over per acre. Oats were not quite so good, being only 35 bushels per acre. Barley, potatoes and turnips were an excellent crop, as well as some feed corn. The boys according to their age took part in all the farm operations this crop involved, under the direction of our farm instructor, Mr. Brigham. Each boy had a small plot in the garden as his own special care. In connection with the farm there are at present 6 horses, 10 cows, a number of young stock, besides pigs and poultry.

Industries Taught.—The boys get a thorough insight into and practical training in all lines of mixed farming. They also learn the use of carpenter tools in simple work such as would be required on a farm. The girls receive a thorough training in all lines of housework,—washing, ironing, baking, dairying, sewing and knitting.

Moral and Religious Training.—On account of our proximity to reserve life and influence, we have not only to educate and elevate the children, but behind them the people on the reserve. This makes our school work harder and more discouraging at times, but in the end more permanent results are secured. Our efforts have been directed toward securing self-government rather than government from outside force. Rules and regulations are relegated as much into the background as possible. Training in Bible truths and attendance upon the public worship of God are made the foundation of all morals.

Health and Sanitation.—I am sorry to have to report a considerable amount of sickness during the year. In the autumn we had several cases of typhoid, although none of them were very severe. The infection in most of the cases was obtained while the pupils were home on vacation, as it was upon their return that the outbreak occurred. In the winter and spring we had nine cases of pneumonia. By good nursing and the splendid service of Dr. Wallace only one case was fatal, although another one will never be strong on account of resulting heart trouble. All cases of infectious diseases have been isolated at once. The other two deaths that occurred were due to tuberculosis, and were pupils who had been home several months on sick leave. The drainage and ventilation continue good. Our chief danger of epidemics is from defective water-supply.

Water Supply.—Our only source of supply besides rain-water is the Assiniboine river. In addition to the labour of drawing it this water is not at all good, and is bound to become worse as towns grow up and settlement progresses. The want of a good water-supply retards improvement in many lines.

Fire Protection.—In frame buildings fires are always very dangerous. They are doubly so when there is no adequate fire-fighting appliances. We have a few hand-grenades, a dozen fire-pails filled with water and some Patton fire-extinguishers. Should a fire occur night or day and get a start, nothing could be done. By great care and watchfulness we have fortunately escaped thus far.

Heating and Lighting.—The school is heated by two wood furnaces and two or three stoves in outlying parts. Light is supplied by coal-oil lamps.

Recreation.—In winter there is coasting, skating and occasional drives. In summer they indulge in football, skipping and various other games. In wet and stormy weather games are provided for them inside.

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General Remarks.—With but a few exceptions the parents have perfect confidence in the school and its care of the children. They seem to appreciate our aim to make their boys and girls industrious, and have them good farmers and good house-keepers. One of our pupils now has the most land broken and in crop of any Indian in this agency. Hence they do not wish their children to go elsewhere to school.

All of which is respectfully submitted.

I have, &c.,

W. McWHINNEY,

Principal.

PROVINCE OF SASKATCHEWAN,

DUCK LAKE BOARDING SCHOOL,

DUCK LAKE, SASK., July 25, 1906.

FRANK PEDLEY, Esq.,

Deputy Supt. General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my annual report for the fiscal year ended June 30, 1906.

Location.—The school is located about $\frac{1}{2}$ mile from the town of Duck Lake, and 3 miles from Duck Lake reserve.

Land.—The land in connection with the school comprises 100 acres, belonging to the government. Adjoining the school land there is one half-section northeast of section 33, township 43, range 2, west of the 3rd meridian, which belongs to the corporation of the Oblate Fathers, but which is cultivated for the benefit of the school, wheat, oats, barley, hay and potatoes being the chief productions thereon.

Buildings.—The main building consists of an entrance hall, parlour, principal's office, and sleeping apartments and dining-room. The girls' quarters are commodious and comfortable. An old building which had served as a storehouse has been transported to a more convenient location and repaired for a sewing-room; this supplies for the moment a long-felt want. The boys' apartments are over-crowded. Application was made to the government for aid to enlarge the buildings, but it being too late for consideration the necessary steps cannot be taken this year.

Accommodation.—There is ample accommodation for 60 girls, but the number has ranged around 50 during the year. The boys are still in much too small quarters, especially in dormitory and recreation-room.

Attendance.—The authorized number, 100, has been maintained throughout the year. In general there are 10 or 12 more boys than girls.

Class-room Work.—The application of the pupils has been very satisfactory this year. Much prominence has been given to correspondence, both general and commercial. The literary attempts of several have found place in the editorial pages, and have called forth very favourable comments. Book-keeping and practical business transactions have been taught with very good success in the senior division. A system of money-dealing has become very popular among the pupils. They receive weekly payment for their different offices, and with purses full of a currency which is only legal within the limits of the institution the children purchase their clothing, and pay their current expenses, and buy playthings and sweets for their holiday amusements.

At the beginning of each season a regular sale of all things required for the season's outfit is held, and the children enjoy this immensely. We find that it teaches them to be provident. What is particularly gratifying is to see some even in spring

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buy winter garments to be kept in reserve for them. Those whose outlay has exceeded their income are obliged to be satisfied with what remains after the rich have had their choice. They are seldom caught twice with empty purses. This system of encouragement has been pronounced by onlookers the best and most practical ever witnessed. It wears well also, having already existed for two years without flagging.

Farm and Garden.—The garden products were above the average. Both vegetable and floral productions were of the first class.

The farm and garden products for 1905 were as follows: wheat, 900 bushels; oats, 926 bushels; barley, 231 bushels; potatoes, 520 bushels; rye, 14 bushels; pease, 13 bushels; flax, 4 bushels; turnips for table use, 20 bushels; beets for animals, 68 bushels, for table use, 20 bushels; cabbages, 800 heads; tomatoes, 15 bushels; carrots, 25 bushels. Besides this we gathered a large quantity of currants, radishes, celery, asparagus, lettuce, squash and sweet corn.

At the annual agricultural exhibition 16 first and 4 second prizes were awarded to the school on farm and garden products.

Industries Taught.—The boys are all trained in practical gardening and farming. The girls are systematically trained in tailoring, dressmaking, plain sewing, knitting, mending and cooking. At the annual exhibition five first prizes in the culinary department and eight in manual work were awarded to our school girls.

The girls have acquired great facility in the art of butter-making, braiding and dyeing straw for hats, and soap-making. Also several have added to their outfit, in awaiting their discharge, a number of patch-work quilts, made from the best pieces cut from castaway clothing, thus learning to utilize to the last inch everything that passes through their hands.

Paper-cutting and picture-framing, with coloured straw and other costless material, have inspired a taste for decoration which it is hoped will encourage them to make their home more attractive in the future.

Moral and Religious Training.—I can say that in the matter of morality and religious training the progress is most gratifying. Lessons are daily taught to all the children, and by word and example nothing is left undone to form solid habits of virtue in their young souls, that may enable them to continue in the path of right-doing when left to themselves. The children appear attached to the staff and the law of love rather than fear predominates. A family spirit pervades the institution,—such has been the impression of many visitors, and I am happy to say they are not mistaken.

Health and Sanitation.—As usual every precaution is taken to prevent disease, and no contagion appeared during the year. In March a boy broke his arm by falling on the ice, but it is completely cured. We had three serious cases of pneumonia in the spring, but all recovered nicely. Last August a little girl, while spending a few days with her parents, received some kind of an internal injury from which she never recovered; she died in April. Two boys succumbed to consumption, which seems to be hereditary in many Indian families.

Fire Protection.—Our appliances in case of fire are four 'Stempel' one 'Victor' and three 'Patton' fire-extinguishers, sixteen buckets, six axes and barrels of water.

In addition to the above the government has furnished us with a force-pump, which is not yet in working order.

Heating and Lighting.—Three furnaces kept going night and day during cold weather kept the house at a healthy and comfortable temperature. The lighting in house, barn and stables is by acetylene gas, the machine being in an isolated apartment, to which none except the one in charge is admitted.

Admissions and Discharges.—Two honourable discharges were granted during the year and six admissions.

Recreation.—Outdoor games for both boys and girls are many and varied. The grounds are so large that all have space to follow their inclinations. No games are compulsory, therefore romping, skipping, ball-playing and swinging never flag, while

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indoors we enforce gymnastic exercises to a certain extent, followed by checkers, marbles, and not infrequently singing and music make up a part of the recreation.

The older girls amuse themselves very frequently in a garden placed exclusively under their management, and so successfully have they combined work and pleasure that the first new vegetables found their way to the tables from the girls' garden. The boys have added to their usual sporting equipments a turnstile and a trapeze, which furnish them with good muscular exercise.

General Remarks.—Inspector Chisholm made his annual inspection in January, and his visit as usual gave both staff and children the greatest pleasure. He commended highly the family spirit that pervades the institution.

The pupils gave a musical and dramatical entertainment to the public in the month of February. They executed roles in a drama of two hours' time with perfect facility, showing as much ease and grace as might be expected only from those born and bred in the heart of civilization.

On June 30, Agent Macarthur presided at the honourable discharge of Rosalie Arcan and Mary Jane Ookeemookaykake. Each girl made her farewell address to all present, and in turn the children expressed their regrets at the departure of those whom they had learned to love with sisterly affection.

Rosalie has gone to reside with her parents at Muskeg Lake. Mary Jane was immediately given in marriage to a man from Battleford, who it appears has a comfortable home and fair income. Both girls having always given great satisfaction by their excellent moral and religious conduct, they promise to raise the standard of womanhood in their respective localities.

I embrace this opportunity to return my thanks to the government officials, who have so materially seconded my efforts to improve the work done in this institution. To Mr. Macarthur, Indian agent, and Inspector Chisholm is due my sincere appreciation of their kind and courteous efforts to assist me in discharging my duties of principal.

The staff, I am most pleased to say, continue to employ every means to bring the departments under their supervision to a high standard of perfection.

I have, &c.,

O. CHARLEBOIS, O.M.I.,

Principal.

PROVINCE OF SASKATCHEWAN,

FILE HILLS BOARDING SCHOOL,

BALCARRES, July 25, 1906.

FRANK PEDLEY, Esq.,

Deputy Supt. General of Indian Affairs,

Ottawa.

SIR.—I have the honour to submit my annual report on the File Hills boarding school for the fiscal year ended June 30, 1906.

Location.—The school buildings are situated on section 33, township 22, range 11, west of the 2nd meridian. They are not on the reserve but adjoining it.

Land.—The northeast quarter of section 32, township 22, range 11, west of the 2nd meridian, and also all that part of section 33 which is outside the boundaries of the Okanese reserve belong to the school. During the past year this land was purchased from the department by the Presbyterian Church; in all 253 acres.

Buildings.—The buildings are: the home, the school-house, the laundry, a stable, granary, carriage-shed, hen-house and two root-houses.

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Accommodation.—There is accommodation for 25 children and a staff of 4.

Attendance.—The attendance was regular until towards spring, when it was again found necessary to send several of the children to the Indian Head hospital to undergo operations.

Class-room Work.—The class-room work was rather broken in upon owing to there being no regular teacher appointed during the year. Now that this is remedied, we look for better results. During the three months that the school was under the instruction of Miss Gordon good work was done, and for the last quarter of the fiscal year it has been very fair. An ex-pupil had charge until Miss Cunningham, the regularly appointed teacher, should be freed from her teaching duties in Winnipeg and take up her work at the school.

Farm and Garden.—Last fall after feeding considerable grain in the sheaf, we threshed 614 bushels of first-class oats from a 15-acre field. Hay sufficient was put up by the school to last until spring.

The garden gave a plentiful return, providing the table with a variety of vegetables during the whole year, as well as adding about \$80 to our income by the sale of garden produce.

The green wood cut on the school property by the farm instructor and the boys would be worth about \$300. As was the case last year, we have our next winter's wood all ready in the wood-yard.

Estimating the different farm produce, including hay, wood and butter, we have benefited by our farm to the extent of \$109. Most of this was consumed at home.

At the close of the present year we have under cultivation 57 acres: 5 acres in lawns and vegetable gardens, 10 acres under wheat, 15 acres under oats, and the remaining 27 acres in a small summer-fallow, and breaking that is being prepared for crop next year. We have 18 head of cattle, 4 horses, the property of the church authorities, and 3 private ones, 15 pigs and some hens.

Industries Taught.—The girls are taught to be clean, neat, economical house-keepers and home-makers, with all that this includes. The last year a girl attends school, except in special cases, she is taken out of the class-room and given entire charge of the staff, cooking, washing, ironing, &c. She is given a cow to milk, and she looks after the milk, cream and butter. She does all her own sewing and mending. The idea is to train the girl to meet and plan for all the various daily duties of a home.

The boys are trained to be practical farmers and gardeners. They are taught the proper care of stock, and to do general chores both outside and in. The system is still being carried out of allowing the boys one or two years before leaving school to labour for part of each summer on their own farms in the colony. Two boys who will be discharged next spring will harvest this fall a twenty or twenty-three acre crop of wheat, and also have about fifty acres ready for crop next spring. It places a boy in a position where he neither needs to beg or go into debt the first year he leaves school and goes to settle on his farm.

Moral and Religious Training.—These subjects receive special attention. The Bible is carefully studied and memorized, and the child is taught to base his ideas of right and wrong on its teachings. There is religious instruction daily.

Health and Sanitation.—During the winter and spring we had three cases of sickness which were serious. One was fatal: cause, *scrofula* in the bone. The other two had severe attacks of *pleurisy*, but both are quite recovered. A fourth child had to have her remaining hand amputated. She now appears to be perfectly free from disease and is in very good health. When the artificial hand with which she has been so generously provided by the government arrives, she will not be so helpless as she is at present. At the time of writing all the children are in excellent health. The sanitary conditions of the school are good.

Water Supply.—We have a good well. The water is drawn from it into the kitchen by means of a pump.

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Fire Protection.—We have ladders, two fire-extinguishers, four fire-axes, eleven fire-pails, and water always convenient. There are two ways of escape from every bed-room.

Heating and Lighting.—One furnace and five stoves are used for heating the building. Coal-oil lamps are used for lighting purposes.

Recreation.—The children enjoy the ordinary outdoor sports and games. Various games in the house are introduced during the long winter evenings.

Ex-pupils.—The ex-pupils are all doing very well.

I have, &c.,

KATE GILLESPIE,

Principal.

PROVINCE OF SASKATCHEWAN,

ISLE À LA CROSSE BOARDING SCHOOL,

GREEN LAKE P.O., July 7, 1906.

FRANK PEDLEY, Esq.,

Deputy Supt. General of Indian Affairs,
Ottawa.

SIR,—I beg to submit my annual report on the Isle à la Crosse boarding school for the year ended June 30, 1906.

Location.—The school is located on the south end of a foreland of Isle à la Crosse lake, 5 miles west from the mouth of Beaver river. It is built on free land, the country being unsurveyed, and no treaty existing between the Dominion government and the Indians.

Land.—The land, about 40 acres or more in area, occupied by the establishment, is bounded on the northwest by the property of Revillon Brothers, fur traders, and is surrounded on the three other sides by the lake. The whole is, by right of occupancy, the property of the Roman Catholic mission, which built the school-house and surroundings at their own expense and handed them over for the use of the school. Half of the land is but quicksand and not fit for cultivation; the other half is partially under cultivation, partly in pasture, and on it alongside the shore stand the buildings. But this last part is very low, exposed to flood, and does not answer the conditions required for a first-class institution. The Roman Catholic mission having been founded and sustained at the missionaries' own expense for so many years, is the reason why another site was not chosen.

Buildings.—The school-house is divided as follows: two class-rooms and the refectory on the ground floor, the dormitory and the sewing-rooms upstairs. A few yards from this school-house stands another house of two stories, the first being used as a laundry and the second as a store.

Accommodation.—There is room for about 40 pupils and a staff of 10 persons, but these houses are very old and have been so deteriorated by time and flood that the building of new ones becomes an absolute necessity.

Attendance.—The attendance has been perfect, as shown by the quarterly returns.

Class-room Work.—The subjects taught are those prescribed by the school programme: reading, writing, grammar, arithmetic, geography, history and general knowledge. In this last branch the pupils show very much interest, and they find ample matter for the development of their very limited circle of practical knowledge. Vocal music also is especially welcomed by the pupils.

Farm and Garden.—We have a field of barley of about 10 acres, a field of potatoes and about 6 acres of turnips, and a garden where every kind of berry and vegetable is cultivated.

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Industries.—The girls are taught the different kinds of household work, as cooking, knitting, sewing, mending, washing, ironing, &c.

The boys help in the farm and garden, and in feeding the cattle.

Moral and Religious Training.—Every day after school there is half an hour of religious instruction, and every effort is made to inculcate in the children's minds moral and religious principles. They attend divine service regularly.

Health and Sanitation.—The health of the pupils has been excellent during the whole year; only a few attacks of grippe, but no serious case.

The best attention is given the pupils in order to make them adopt the most hygienic ways, especially in cleanliness.

Water Supply.—The water of the lake is the only good water that can be had here for drinking purposes.

Fire Protection.—The school is well provided with outside doors and stairs, by which escape is made very easy in case of fire. For more safety two ladders have been added to these. A great number of buckets and axes are at hand, and the lake is at a very short distance from the house.

Heating and Lighting.—The house is heated with common stoves, and lighted with coal-oil lamps.

Recreation.—Games are very lively; there are large playgrounds; the pupils indulge in many kinds of games; ball, croquet, skipping, &c., and sometimes canoeing, &c.

During the winter on cold days they have rooms spacious enough to amuse themselves in, and on warmer days the boys, especially, are fond of sleighing and skating on the lake.

Staff.—The staff of the Isle à la Crosse boarding school is as follows:—Rev. Father Aensel, principal; Brother Pouliquen, farmer; Brother Balweg, fisherman; Mother Marie Bénédicte, superior; Sister Anne Madeleine, dressmaker; Sister Anne Bénédicte, cook; Sister Marie Auguste, nurse; Sister Marie Joseph, mentor for the boys, and Sister Marie Théophile, teacher.

I have, &c.,

FRANÇOIS AENSEL,
Principal.

PROVINCE OF SASKATCHEWAN,
EMMANUEL COLLEGE,

PRINCE ALBERT, September 12, 1906.

FRANK PEDLEY, Esq.,

Deputy Supt. General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my annual report of this school for the year ended June 30, 1906.

Location and Land.—The school is situated about 2 miles west of the city of Prince Albert. The land in connection therewith is a river lot, having a frontage of 12 chains, and extending back 2 miles. The lot contains 200 acres.

Buildings.—There are three buildings occupied by the staff and pupils. The main building is occupied by the female members of the staff and girls. The bed-rooms, dormitories and lavatory are in the upper story, and in the lower story are the school-room, the dining-room, kitchen and pantry. There are also in this building a clothing-room, sewing-room, girls' dressing-room and a room for cases of sickness. In the second building is a large clothing-room, a room for drugs and medicines, an office

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and apartments for the principal. In the third building are dormitories, lavatory, bath-room and recreation-room for the senior male pupils, a room for the head teacher, and a room for the outside man. The outdoor buildings are: a large house, 40 x 16 feet, and used as a granary, storehouse and dairy; a coach-house, 32 x 16 feet; a stable, 44 x 22 feet; two pig-pens, one 22 x 12 feet, the other 24 x 14 feet; a hen-house, 20 x 14 feet; a feed-house, 16 x 16 feet, and an implement-shed, 28 x 19 feet.

Grounds.—The ground immediately attached to the buildings is laid out so as to afford ample playgrounds for the pupils, both boys and girls.

Accommodation.—The boys' building is very old and dilapidated. The girls' dormitory in the main building is not sufficiently spacious, but these defects with sufficient outlay could be easily remedied.

Class-room Work.—The pupils attend school twice daily, with the exception of the girls, who assist in the dining-room and kitchen by turns. The school hours are from 9.30 a.m. to 12 noon, and from 1.30 p.m. to 3 p.m. Besides the regular school hours they study from 8 to 8.30 a.m. and from 7 to 8 p.m. The course of study is the same as that used in the public schools of the Northwest provinces.

The pupils are graded as follows:—

	Boys.	Girls.	Total.
Standard I.	10	9	19
“ II.	7	12	19
“ III.	8	1	9
“ IV.	2	1	3
“ V.	2	1	3
Total.	29	24	53

The reserves from which the attendance is drawn are as follows:—

Bazil Starblanket's reserve.	19
John Smith's reserve.	14
James Smith's reserve.	4
William Charles' reserve.	5
William Twatt's reserve.	5
Mistawasis' reserve.	2
Non-treaty.	4
Total.	53

Farm and Garden.—Our crop last fall was as follows: wheat, 382 bushels; oats, 600 bushels; barley, 182 bushels; potatoes, 317 bushels; carrots, 60 bushels; hay, 38 tons.

The products of other industries connected with the farm were: pork, 725 pounds; chickens, 162 pounds; turkeys, 270 pounds; butter, 364 pounds; eggs, 400 dozen.

Industrial Work.—All the general work required on the premises is performed by the pupils. The girls are taught all kinds of useful household work, such as sewing, knitting, making clothing, mending, darning, washing, ironing, house-cleaning and cooking. The bread used in the school is made by the girls, and is baked in a portable Reid oven which has a capacity of 80 loaves of two pounds' weight.

The boys are taught the various kinds of farm work, such as ploughing, harrowing, harvesting, haymaking, carpentry, repairing of fences, attending to horses and cattle, milking cows, feeding pigs, drawing water, chopping and sawing wood, plastering, kalsomining, and any ordinary work required.

Moral and Religious Training.—Morning and evening worship is regularly conducted by the whole school. On Sunday regular religious services are held in the college chapel morning and evening. Every Sunday afternoon at three o'clock Sunday

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school is held. This lasts one hour, and is always a profitable hour. The children take a deep interest in the study of the Holy Scriptures, and are very fond of singing hymns. Some of the pupils play very well on the organ. A number of our pupils are communicants. The conduct of the pupils has been very satisfactory.

Health and Sanitation.—The health of the pupils has been good. The children have as much outdoor exercise as is practicable. The dormitories, class-rooms and all other rooms are kept very clean and well ventilated.

Water Supply.—This is not as good as it should be. We are reduced to one well and we require another.

Fire Protection.—We have 8 fire-extinguishers, which were supplied by the department, 18 hand-grenades, 12 fire-buckets and 2 axes. We carry an insurance of \$5,000.

Heating.—Stoves are used in two of the buildings, but a furnace is used in the main building, where the girls and female members of the staff live.

Attendance.—The attendance has been regular; and during the course of the fiscal year three pupils have been honourably discharged, while four have been admitted to the school.

Recreation.—The pupils have plenty of recreation. The boys have cricket, baseball, football, leaping and racing.

The girls enjoy dumb-bell exercise, skipping, throwing and catching the ball, swinging, reading and music.

They take a walk out almost daily, attended by a female member of the staff.

We try to make the children feel as comfortable and happy as possible.

I have, &c.,

JAMES TAYLOR,

Principal.

PROVINCE OF SASKATCHEWAN,

GORDON'S BOARDING SCHOOL,

KUTAWA P.O., September 19, 1906.

FRANK PEDLEY, Esq.,

Deputy Supt. General of Indian Affairs,

Ottawa.

SIR,—I beg to submit the annual report of the Gordon's boarding school for the year ended June 30, 1906.

Location.—This school is built on the George Gordon's reserve, in the Touchwood agency, about $1\frac{1}{2}$ miles from the centre of the western boundary line, and from 12 to 15 miles from Kutawa post office.

Land.—A half-section of good farming land has been allotted to the school on the reserve about a mile west of the buildings. In addition to this, there are large gardens, playgrounds, and a pasture.

Buildings.—The main building is of stone, and comprises: school, lavatories, dormitories, dining-room, kitchen, dairy, pantry and rooms for staff. The other buildings are all log, viz., stabling for 9 horses, 18 cattle, 10 calves, poultry-house, ice-house, storehouse, laundry, and carriage-shed.

Accommodation.—Accommodation can be arranged for 30 scholars and a staff of 4 or 5.

Attendance.—As this is a boarding school, the attendance is under control and is always good.

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Class-room Work.—This has consisted of the subjects laid down in the programme prescribed by the department, and has been carried on as thoroughly as possible.

Farm and Garden.—The farm and garden work has been very successful. Over a ton of onions was stored, and most thoroughly appreciated during the winter. Over 400 weight of green tomatoes were pickled and preserved, and proved a most acceptable addition to the food-list of both staff and scholars during the winter. Roots were harvested in proportionate quantities, and the value of such stores was abundantly demonstrated by the excellent condition of our cattle and horses in the spring.

Our oat crop was very satisfactory, over 300 bushels being threshed, the first time in the history of the school.

During the summer 5 acres of the school land was broken, and during the season worked up and sown with oats, yielding a splendid crop. This is also an entirely new departure, and should be the precursor of a regular and complete system of farming in connection with the school.

Industries Taught.—The industries taught are entirely agricultural and domestic. The care of horses, cattle, pigs and poultry; milking, farming, gardening, &c., are undertaken by the boys; while cooking, washing, housekeeping, sewing, mending and knitting are matters in which many of our girls are proficient.

Moral and Religious Training.—This is made a matter of prime consideration, and we have no reason to think the efforts made to ground the pupils thoroughly in these matters are made in vain.

Health and Sanitation.—The health of the children during the twelve months while generally good has suffered in individual cases. During the summer vacation one of our best boys, Walter Poorman, caught a cold, which settled on his chest, and developed consumption. He was discharged by order of the commissioner in the fall of 1905, and died in February of the present year. In November an outbreak of scarlet fever occurred, and the school was under quarantine till March. Eight cases, in each instance of a mild type, made perfect recoveries, but in one, Charles Fisher, consumption afterwards developed, and the boy, discharged in January, died in April. These are the only serious illnesses, and with these exceptions the state of the school has been most satisfactory. The sanitary conditions have been fully maintained.

Water Supply.—The water-supply is still very defective.

Fire Protection.—This continues as in former years, viz., 2 Babcocks, 10 hand-grenades, 11 fire-buckets, 4 axes, 1 force-pump and 2 coils of hose.

Heating and Lighting.—The heating and lighting are still by stoves and coal-oil lamps respectively.

Recreation.—This consists of football for both boys and girls, and other outdoor games. The usual indoor games, music, &c., enliven the winter.

General Remarks.—The loss of Mr. and Mrs. Bosomworth in August, and the subsequent changes, made the work more difficult, and the strain on the staff during the long weeks of quarantine was very heavy. The staff struggled on bravely to the end, however, and deserve much commendation for their untiring efforts for the well-being of the children during that period.

In April we passed two of our best boys on to Elkhorn, and are glad to know they are doing us much credit there.

The children have maintained their high character for good temper and industry gained in former years, are a joy to work amongst, and should as men and women do much to raise the character of their people in future years.

All of the above is respectfully submitted.

I have, &c.,

J. W. HARRISON,

Principal.

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PROVINCE OF SASKATCHEWAN,
KEESECKOOSE (ST. PHILIPS) BOARDING SCHOOL,
COTÉ P.O., July 15, 1906.

FRANK PEDLEY, Esq.,
Deputy Supt. General of Indian Affairs,
Ottawa.

SIR,—I have the honour to forward my annual report on the Keeseekoose (St. Philips) boarding school for the year ended June 30, 1906.

Location.—The school is located on the southwest quarter-section 2, town-ship 32, range 32, west of 1st meridian. It is outside the reserve.

Land.—The land consists of a homestead (160 acres) originally covered with poplar scrub, which has since been partly cleared. It is suitable for cereals and garden produce.

Buildings.—The main building contains chapel, school-room, sitting-room, dining-room, sewing-room, kitchen, dormitories for girls, sisters and teacher.

A second building comprises dormitories for the priests, boys and hired man. This building is a short distance from the other, to the north.

In addition there are stables for horses and cattle, a poultry-house; also wash-house and ice-house lately added.

Accommodation.—There is accommodation for 30 children, but we can find room for more; also for the principal, assistant, sisters, teacher and hired man.

Attendance.—There are 25 children in attendance; 16 girls, 9 boys.

Class-room Work.—The subjects taught are: reading, writing, arithmetic, geography and music.

Farm and Garden.—We have put in a few acres of wheat, oats, barley; also potatoes and vegetables.

Industries Taught.—The boys are taught general farm work, ploughing, field work, milking; the girls are taught needle-work, sewing, washing, house-cleaning, kitchen work and cooking.

Moral and Religious Training.—Service is held in the chapel every morning, at which all attend. Catechism is taught, sacred scriptures expounded, and habits of uprightness inculcated.

Health and Sanitation.—The pupils are generally in good health. Some time ago when two of the girls were sick one was sent home and the other was isolated. The rooms are well ventilated.

Water Supply.—Our water-supply is obtained ordinarily from a creek. A well somewhere about 30 feet deep was dug, but did not prove satisfactory, and last winter we had much trouble in keeping up the supply. We have lately found a well which we hope will give satisfaction.

Fire Protection.—We have in our possession 8 fire-extinguishers, 12 fire-buckets and 2 ladders.

Heating and Lighting.—The buildings are heated with stoves and lighted with lamps.

Recreation.—There is a fifteen-minute interval between lessons both morning and afternoon; also before and after breakfast. After dinner there is one hour, and the evenings, when the pupils are not engaged in work, are devoted to recreation.

I have, &c.,

J. DECORBY, O.M.I.,

Principal.

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PROVINCE OF SASKATCHEWAN,
MUSCOWEQUAN'S BOARDING SCHOOL,
TOUCHWOOD HILLS, September 6, 1906.

FRANK PEDLEY, Esq.,
Deputy Supt. General of Indian Affairs,
Ottawa.

SIR,—I beg to submit the following annual report of this school for the fiscal year ended June 30, 1906.

Location.—The Muscowequan's boarding school is on the northwest quarter of 14-27-15, 12 miles from the Kutawa agency and 3 miles from the Touchwood post office.

Land.—The land connected with the school is a homestead of 160 acres, and belongs to the Oblate Fathers, to whom nothing is paid for the use and benefit given to the school. There is a large garden, nicely laid, in front of the school and surrounded with trees. On the other side is a nice parterre also surrounded by trees.

Buildings.—Besides the school, which is of stone, there is the boys' play-room.

Accommodation.—There is ample room for 40 children and a staff of 7.

Attendance.—Thirty-four Indian children attended school during the past year.

Class-room Work.—Classes are from 9 to 12 a.m. and from 1.30 to 4 p.m. The programme of studies authorized by the department is strictly followed. Great attention is given to correct English conversation, writing, reading, arithmetic, spelling, drawing, geography, grammar and vocal music. As the reports testify, good progress in all the above mentioned subjects has been noticed during the past year.

Industries Taught.—The girls are trained in all branches of domestic work: baking, cooking, sewing, knitting, dressmaking, rug-making and darning. All the children's clothing is made in the school.

Farm.—Last spring 100 acres was cropped: 50 in wheat and 50 in oats, barley, flax-seed and spelt. We expect to have at least 4,000 bushels. As our crop was completely destroyed by hail last year, we had no crop at all. We raise more potatoes and vegetables than we need, and have hundreds of pounds of butter to sell. We sold our butter from 25 to 35 cents per pound. Every pound of it is made by the girls. Besides three colts, the school has six teams to work on the farm, and wintered 75 head of cattle. All the crop was put in last spring by the boys, who give great satisfaction in every way.

Moral and Religious Training.—Great care and special attention is given to this part of education, and no effort is spared to instruct our pupils thoroughly in principles of faith and religion. The conduct and general behaviour gives great satisfaction, and it is a matter of pleasure to us and of surprise to visitors to find how willingly they practise the lessons taught them. Time and again we are told by visitors, who are numerous, that the children are cheerful, polite, and agree well together.

Health and Sanitation.—With the exception of three cases of pneumonia, the health of the children has been remarkably good.

Water Supply.—Water is supplied by a windmill.

Heating.—The school is heated by ten stoves with fire-wood.

Recreation.—Girls as well as boys are supplied with different games, music, singing, outdoor exercises and drives.

General Remarks.—In conclusion, I gratefully acknowledge the kindness of the department in supplying us with school material, the devotedness of our esteemed agent, Mr. W. Murison, who is always looked for with pleasure in his monthly visit, as well as the annual inspection of our inspector, Mr. Graham, whose great work for

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the welfare of the Indians and his great success in his field are so well known, even abroad.

I have, &c.,

J. A. MAGNAN,

Principal.

PROVINCE OF SASKATCHEWAN,

UNION LAKE C.E. BOARDING SCHOOL,

UNION LAKE, SASK., July 30, 1906.

FRANK PEDLEY, Esq.,

Deputy Supt. General of Indian Affairs,
Ottawa.

SIR,—I beg to submit the annual report of the Church of England boarding school under my charge for the year ended June 30, 1906.

Location.—The school is situated on the northeast corner of Makao's reserve and about 300 yards southwest of the agency headquarter buildings.

Land.—There are perhaps 30 acres of land connected with this school and mission, this land being part of the reserve.

Buildings.—The present school-house is a new frame building, 30 x 40 feet, three stories high. The lower floor will be divided when finished into two class-rooms. The second floor will be partitioned into rooms for members of the staff and a number of the boys, and is reached by an outside stair, while the third floor will be one large dormitory without partitions, and reached by an inside stair from the second floor. Great care has been taken in providing for ventilation and light, and the whole building has been painted during the year. The three-story log building, 24 x 28 feet, previously used as laundry and boys' dormitories, will be entirely given up for laundry and hospital purposes.

Between these two buildings stands a smaller log building, 20 x 22 feet, and two stories high. The lower floor is divided into two rooms, one of which is used as a store-room for clothing; the other is occupied by workmen engaged about the mission. The upper floor is used as a sewing-room, and is reached by an outside stair.

Nearby is a store-room, 15 x 20 feet, with an upper and lower floor, all used for storing provisions, such as flour, beef, pork, &c.

The building which forms the quarters for the staff and all the girls of the school is made up of six buildings put up at different times, but all connected. Any one of the four outer doors gives access to the whole building, which is about 60 feet square. On the lower floor are the principal's office, Indian waiting-room, two dining-rooms, two bed-rooms, dispensary, bakery, kitchen and pantry. The upper floors are used as bed-rooms for the staff and girls' dormitories. These last are two large rooms 24 x 36 feet and 20 x 24 feet without partitions, and one outer door leading on to a balcony with an outside stair, so that a fire-escape and good, free ventilation are both provided.

There is a cellar 20 x 30 x 7 feet.

Accommodation.—Accommodation can be provided for 70 pupils and a staff of 8.

Attendance.—All the children being boarders, the attendance is regular, except in cases of sickness, which are very few.

Class-room Work.—The children have done good work, and made marked progress during the year.

Farm and Garden.—Our farm land covers about five acres. We raised this year vegetables to supply our whole household. The work was done entirely by staff and pupils.

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Industries.—The boys are taught carpentering and building principally. They also have the care of the horses, cows, pigs and poultry. The girls are taught general housework, i.e., cooking, baking, butter and cheese making, sewing and mending, washing and ironing.

Moral and Religious Training.—Particular attention is paid to this part of their education, and each one of the staff realizes that without careful religious and moral training all other work is wasted. We do not aim so much to teach the tenets of any particular church as to teach them the simple gospel. The aim is to lead them to Christ.

Health and Sanitation.—The health of the children has been good throughout the year. No epidemics have occurred, but in such cases we would use the hospital for isolation purposes.

Water Supply.—This is ample, three wells being used and each containing a supply of good water.

Fire Protection.—Two small chemical fire-extinguishers, pails, axes and constant watchfulness and care as to stoves, stovepipes and chimneys are all the protection we have, with wells and plenty of water in two of the large buildings.

Heating.—All our buildings are heated with wood stoves. Where there is danger of the children playing with fire we use top-draught stoves, so that it is almost impossible for them to get at the fire.

Recreation.—The principal recreations are: football, cricket, swings and athletics, including cross-cut saw and wood-pile.

All of which is respectfully submitted.

I have, &c.,

J. R. MATHESON,

Principal.

PROVINCE OF SASKATCHEWAN,

ONION LAKE R.C. BOARDING SCHOOL,

ONION LAKE, July 20, 1906.

FRANK PEDLEY, Esq.,

Deputy Supt. General of Indian Affairs,

Ottawa.

SIR,—I have the honour to submit the following report on the Onion Lake Roman Catholic boarding school for the year ended June 30, 1906.

Location.—The school is situated on Seekaskootch reserve, on the north side of the Saskatchewan river, about 12 miles from Fort Pitt.

Land.—About 7 or 8 acres of land are fenced in and set apart for school purposes: buildings, garden, playground, &c. The land belongs to the Indians of the reserve.

Buildings.—The school is a frame building, 45 x 35 feet, three stories high. On the first floor are junior class-room, which also serves as boys' recreation-room, and pupils' dining-room; on the second floor are senior pupils' class-room, girls' sewing-room and an infirmary for sick pupils. The third floor is one large room: girls' dormitory. Another building, 25 x 30 feet, two stories high, is the sisters' house. Up to last summer these two buildings were fourteen yards apart, and this was very inconvenient, the kitchen being in one building and the dining-rooms in another. During this past year a frame building, 30 x 26 feet, 33 feet high, has been put up between the two first buildings and joined to them by a winding staircase from top to bottom. In this new building are the kitchen and dining-rooms for staff, on the first floor;

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storehouse, ice-house and pantry are attached to this. The second floor is the chapel and the third is the boys' dormitory.

Accommodation.—There is ample accommodation for 70 pupils and a staff of 10.

Attendance.—The average attendance during the year was 43. There were 9 discharges and 10 admissions during the year.

Class-room Work.—Two teachers are charged with the standards in different rooms. The class hours are from 9 to 11.45 a.m. and from 1.30 to 4 p.m., with an intermission of fifteen minutes in each session. The class work is done neatly, with application and emulation. The pupils show love for study. Twenty minutes each day is given to singing. The pupils form the church choir, which is considered very good; they sing Latin, English, French and Cree.

Farm and Garden.—About three acres of land are cultivated for gardening. All kinds of vegetables are raised with pretty good success. Both boys and girls take an active part in the garden work.

Industries Taught.—The boys have the care of horses and cattle, the preparing of fuel, baking, cobbling, help with the washing and have the sweeping and dusting of their own rooms. During this year, when the carpenters have been in the house most of the year, the bigger boys have helped considerably with ceilings and wainscoting. A great pleasure and reward is to let them go out to the hay camp for a few weeks during haying. The girls are taught and carefully trained in all branches of domestic work: cooking, washing, ironing, sewing, darning. All the pupils' clothes, both boy's and girl's, are made in the house.

Moral and Religious Training.—Great care and special attention are given to this most important part of education. Religious instruction is imparted twice a week to the children by the priest, morning and evening devotions are attended in the chapel. Respect and obedience for all authority are continually inculcated and insisted upon.

Health and Sanitation.—The pupils' health has been remarkably good during the year; nevertheless we had two deaths. One girl died quite suddenly after a first hemorrhage. The other girl was weak; her mother took her home for a while in May, a few days after they moved into their tent, as all Indians do for summer, where we suppose the ground was too damp and cold. The girl took a bad cold, and grew visibly worse. They then brought her back to the school, but too late. In spite of the best of care and nursing she died June 9.

Dr. Amos, of Lloydminster, visited and examined the children that had not yet passed a medical examination. He was quite surprised to find such healthy Indian children and so free from tubercular glands. There is nothing neglected in the attention paid to the sanitary condition of the school: good and daily ventilation, disinfectants, frequent scrubbing and washing.

Water Supply.—Plenty of good water is supplied from a well a few yards from the house.

Fire Protection.—One well, pails, axes and in summer barrels of water are kept in readiness. From both boys' and girls' dormitories are outlets on each side: outside stairs leading from the top down to the ground. The stairway is wide and well lighted. The greatest of care is taken of lamps and stoves; pupils are never allowed to light either.

Heating and Lighting.—The buildings are heated with wood stoves and lighted with coal-oil lamps suspended from the ceiling in pupils' apartments.

Recreation.—Three hours of recreation are given to the pupils daily; in summer four. All recreations are taken in the open air as much as possible, even in winter. Swings, football, racing, jumping poles, croquet, lawn tennis, reading, coasting and skating are the chief amusements. During the summer holidays a couple of weeks' camping out on the side of a nice lake is greatly enjoyed, and seems to do much good to the pupils' health.

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General Remarks.—Before closing class for the summer holidays the pupils gave a public entertainment to friends of the institute and to their parents. The programme consisted of national songs, drills, comic drama, dialogues and recitations. Prizes were then distributed to the pupils who had gained the greatest number of good marks during the term. One prize in each standard for class work, prize for good conduct, for religious training, singing and industry. The prizes were distributed to the pupils by the gentlemen and ladies present. The distribution seemed to interest all present, and the recipients appeared proud and satisfied and well rewarded for their constant efforts during the year.

I have, &c.,

E. J. CUNNINGHAM.

Principal.

PROVINCE OF SASKATCHEWAN,
ROUND LAKE BOARDING SCHOOL,
WHITEWOOD P.O., June 30, 1906.

FRANK PEDLEY, Esq.,

Deputy Supt. General of Indian Affairs,
Ottawa.

SIR,—I beg to submit the following as my annual report on this institution.

Location.—The school is situated at the east end of Round lake, in the Qu'Appelle valley, not on a reserve.

Land.—The following lands belong to the school: 22 acres of northeast quarter of section 14, in township 18, range 3, west of the 2nd meridian; also south half of section 23 in the same range and township, in all, 283 acres, about 50 acres being in the hills and not fit for cultivation.

Buildings.—The buildings are frame on stone foundations. The main building is 54 x 70 feet, two stories with basement. It consists of waiting-room, dining-rooms, parlour, kitchen, laundry, bath-rooms, store-rooms and dormitories. The school building includes class-rooms, teachers' and farmers' rooms and boys' dormitory.

Accommodation.—The buildings are capable of accommodating 80 pupils.

Attendance.—The attendance during the year has been good.

Class-room work.—The work in the school-room has been good. The programme of lessons prescribed for Indian schools has been followed. Vocal and instrumental music has been taught.

Farm and Garden.—We have about 100 acres of land under cultivation, and about 50 more has been broken during the past month. Our garden yielded enough vegetables to supply the school during the year with potatoes, turnips, cabbage, carrots, beets, corn, tomatoes, onions, melons, &c. The farm has given us a good profit after paying the salary of the farm instructor and all other farm expenses.

Industries Taught.—Farm work, care of cattle and dairy work are taught the boys; and general housework, cooking, baking, laundry, dressmaking and plain and fancy needle-work the girls.

Moral and Religious Training.—Instruction is given at our morning and evening devotions; also in the Sabbath school and at the regular Sabbath service.

Health.—On the whole the health of the children has been good during the year. We have to report one case of typhoid fever.

Water Supply.—There is an abundant supply of water from a well; also from a cistern and the river for washing purposes.

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Sanitation.—The buildings are well drained and the buildings and premises kept clean. Good ventilation, regular bathing and changing of garments account in some measure for the good health in the school.

Fire Protection.—Fire-extinguishers, a good supply of water and water-buckets are kept in convenient places. There are fire-escapes from the bed-rooms.

Heating and Lighting.—The buildings are heated with a hot-air furnace and stoves, and lighted by coal-oil lamps.

Recreation.—In summer we have football, croquet, bathing, boating, and in winter tobogganing, skating and indoor games.

General Remarks.—Each pupil at the school is expected to do two hours' work each day, and for any extra work he receives payment. In this way a boy may earn as much as \$3 a week. One of our boys, who is 16 years of age, has now 1 yoke of oxen, 3 cows, 3 calves, 2 yearlings and 3 ponies—all earned at the school, and by the time he reaches 18 years he will be prepared to move on his own farm. Another boy is now breaking in the afternoons on his own farm with oxen earned at the school.

All of which is respectfully submitted.

I have, &c.,

H. McKAY,

Principal.

PROVINCE OF SASKATCHEWAN,
THUNDERCHILD'S (ST. HENRY) BOARDING SCHOOL,
THUNDERCHILD, SASK., June 30, 1906.

FRANK PEDLEY, Esq.,

Deputy Supt. General of Indian Affairs,
Ottawa.

SIR.—I have the honour to submit a report of Thunderchild's (St. Henry's) boarding school for the year ended June 30, 1906.

Location.—The Thunderchild's (St. Henry's) boarding school is adjacent to Thunderchild's reserve, on the Roman Catholic mission.

Land.—The land in connection with the school consists of the southeast quarter-section 6, township 46, range 18, west of the 3rd meridian, patented.

Buildings.—Our main building is of wood, with plastered walls. The ceilings are of wood. There is an abundance of air and light. I regret to say, however, that the walls of the refectory and class-room being nearly all down, contribute little to our comfort during the cold season. In fact the building, situated as it is on a plateau, is much at the mercy of the sharp winter blasts that rush through from the Saskatchewan river. A repairing of these might easily remedy this inconvenience, but our present financial condition renders the undertaking impossible.

Accommodation.—There is accommodation for 20 pupils, with the necessary staff.

Attendance.—Admissions during the year, 1; deaths, 1; number on roll in June quarter, 20. The attendance during the year has been most satisfactory.

Class-room Work.—The programme of studies given by the department is followed as closely as possible under the circumstances. The progress is generally good and encouraging.

Farm and Garden.—We have about 15 acres of potatoes and other vegetables and grain under cultivation. The garden, well stocked with various kinds of vegetables, is in the boys' care. The milch cows, horses and poultry are kept by them also.

Industries Taught.—Farming and gardening, the care of cattle and poultry, baking, laundry work, sewing, knitting, cooking and general housework comprise the industries the children are taught.

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Moral and Religious Training.—As is proper, the moral and religious training of the children receives special care. Respect for authority and obedience is continually inculcated and insisted upon. Discipline is maintained without employing severe measures.

Health and Sanitation.—One death occurred in January last from consumption. This is the first child that died since the school was opened. He died at his home. With this exception, there has been but little illness. The health of the pupils is now good.

Water Supply.—The water is supplied to the house from a well near by. The water is pumped up daily by the boys. A new force-pump, which was set in place in September last, makes this part of the boys' work much lighter and easier. As the water is not in great abundance, a few barrels are kept under eave-troughs to receive the rain-water for the laundry.

Fire Protection.—The protection against fire is rather inadequate, there being but one ladder on the house that could be used in case of fire; and of our two 'Star' glass-lined chemical fire-extinguishers one only is in order. Barrels of water and axes are placed in convenient positions.

Heating and Lighting.—The heating is done by means of wood stoves. Light is supplied by coal-oil lamps.

Recreation.—Recreation is taken three times a day after each meal; during this time the pupils indulge in outdoor games.

General Remarks.—The Honourable David Laird visited the school last August. He was a welcome visitor for both staff and pupils. Everything inspected met with a courteous approval by his honour. His visit was entirely unexpected, he arriving during dinner-time with Mr. J. P. G. Day, our esteemed agent. Everything was unprepared; if news had been received, preparations would have been made. The children were much encouraged by his wise counsels.

In conclusion, I beg to express my sincere thanks to Mr. Day, our local agent, who has always been ready to lend a helping hand when the situation required it.

I have, &c.,

H. DELMAS, O.M.I.,

Principal.

PROVINCE OF SASKATCHEWAN,
BATTLEFORD INDUSTRIAL SCHOOL,
BATTLEFORD, June 30, 1906.

FRANK PEDLEY, Esq.,
Deputy Supt. General of Indian Affairs,
Ottawa.

SIR.—In accordance with your circular of May 8, the following report in connection with this school for the year just ended is respectfully submitted.

Location.—The school is located on the high south bank of the Battle river, about 2 miles west of where this river falls into the north branch of the Saskatchewan, and about 2 miles south of the town of Battleford, which is our post office. The place is beautiful for situation, overlooking towards the north the two towns of Battleford and North Battleford (the latter a divisional point on the Canadian Northern railway), and the two rivers already mentioned, with their picturesque valleys; to the south the Eagle Hill range, and a vast extent of country in all directions. The school buildings are erected on land specially reserved by the Dominion government for the use of this school. The main building, with certain changes and additions rendered

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necessary for the work of the school, is the same that was used as the official residence of the Hon. David Laird, the present Indian commissioner, when he was the first lieutenant-governor of the then Northwest Territories; it was also used as the council chamber for the meetings of the Northwest Council of those days.

Land.—In the immediate vicinity of the buildings we have a reserve of 566 acres, and one of 376 acres, 3 miles east of the school. The former is where all our farming land is: the latter is mainly a hay swamp, where we get our supply of hay each year. The land is in township 43, range 16, west of the 3rd meridian, and embraces portions of sections 15, 17, 18, 19 and 20.

Buildings.—These consist of the main building, in which the pupils and most of the members of the staff reside, the principal's residence, two cottages, carpenter-shop, blacksmith-shop, store-room, stable, well-house, pig-pen, hen-house, warehouse, root-house, laundry, granary, and the usual small outbuildings, besides carriage and implement sheds. We have a good new laundry building, well adapted to its purpose; this takes the place of the old one which was destroyed by fire some years ago. Some new floors had to take the place of old worn-out parts, new bath-tubs put in, and some re-shingling had to be done and sundry minor repairs made.

Accommodation.—We have accommodation for 150 pupils, if we could get that number, and for the staff that would be required to instruct and care for them.

Attendance.—I regret to say that the number has decreased considerably during the year. Only 1 has been enrolled, while 5 boys and 8 girls have been regularly discharged. One boy and 1 girl have died. Seven of the girls who received their limits have been married. We commence the incoming year with an enrolment of 75: 40 girls and 35 boys. A few of these are not on the grant-earning or per capita roll, but are provided for by friends.

Class-room Work.—This is carried on by two teachers in separate rooms—the old council chamber—divided into two by folding doors. The course of studies required by the department is followed, and the pupils are graded from the alphabet up to standard VI. Several of our ex-pupils are engaged in the work of teaching in connection with the Indian schools in Manitoba, Saskatchewan and Athabasca.

Farm and Garden.—We have about 60 acres under cultivation, about 6 of this being worked as a garden and potato patch. At the time of writing everything is growing well, and points to a good yield.

Industries Taught.—Farming and gardening, the care of horses, cattle, pigs and poultry, carpentering, kalsomining, painting, glazing, &c., baking, dairy work, laundry work, sewing, knitting, making and mending clothes, cooking and general housework are taught the pupils.

Moral and Religious Training.—To this we give careful attention as being the true and only foundation on which to build up worthy characters and true citizenship. We have the regular Sunday services of the church, and Sunday school, shortened form of morning and evening prayer, with the reading of holy scripture each day, and a mid-week service each Wednesday evening. A circle of 'The King's Daughters' amongst the girls, and 'King's Sons' amongst the boys, and a branch of the 'Daily Scripture Reading Union,' to which both boys and girls belong, have been carried on for several years, with manifestly good results. These organizations are officered by the pupils, and are carried on under staff supervision.

Health and Sanitation.—We have been blessed with good health throughout the year. The ventilation of the building is good, and the sanitary arrangements are attended to carefully.

Water Supply.—We have plenty of water of the best quality in our wells.

Fire Protection.—We have a number of hand-grenades, Babcock fire-extinguishers, axes, and pails of water placed in different parts of the building. There are four tanks in which a supply of fresh water is kept always. Iron pipes connect with the upper two tanks and lead down to the lower floors, where rubber hose connect with

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them. A McRobie fire-apparatus is also located in the centre of the main building, having pipes and hose extending from it to each story. There are fire-escapes from the dormitories, and a supply of ladders is always kept near at hand.

Heating.—This is done by hot-air furnaces and ordinary stoves, wood being the only fuel used.

Lighting.—Ordinary lamps with coal oil are all we have for this purpose.

Recreation.—Swings, football and other games, with plenty of outdoor exercise, are provided.

Ex-pupils.—Of those who have returned to their reserves some have not done as well as one would wish; in many cases their environment is very much against them. But these are not all; there are others of them who have their own portion of land cultivated, their own houses, animals and other property, and are doing very well. Others again there are who have not returned to reserve life, but have struck out to work amongst the settlers, some at general work, some at carpentering. In this way they gain a knowledge of the settled life of the country, which is a very valuable possession whether they afterwards use it on the reserve or keep on at work amongst the settlers, or become homesteaders eventually, as it is to be hoped many of them will. Some of our ex-pupils are engaged in various places as teachers or helpers in connection with the Indian schools; one is at present attending college taking a university course with a view to entering the ministry; another has completed his college course and been ordained to the sacred ministry of the church—he is married to an English lady, and they are both doing a remarkably good work in charge of one of our missions. Nearly all of the girls that have been discharged are married—most of them on the reserves to ex-pupils or others, but several of them are married to white settlers and are keeping their homes in a very creditable condition. While the results may not be in all cases what some might desire, yet we must not expect too much when we take all things into consideration. Improvement is very evident; the schools are doing a good work, and the leaven of their teaching is seen in the surroundings of their ex-pupils. The schools properly and systematically worked are the true way to solve the Indian problem.

General Remarks.—During the year we had the great pleasure, and consequent cheer and encouragement, of a visit from the Hon. David Laird, Indian commissioner. I beg to thank him and all the other officials of the department for the consideration, courtesy and kindness shown by them in all their dealings with us.

I have great pleasure in bearing testimony to the good work done by the members of the staff, all of which tends to help in accomplishing the great work of teaching and uplifting the Indian.

I have, &c.,

E. MATHESON,

Principal.

PROVINCE OF SASKATCHEWAN,

QU'APPELLE INDUSTRIAL SCHOOL,

LEBRET P.O., July 1, 1906.

FRANK PEDLEY, Esq.,

Deputy Supt. General of Indian Affairs,
Ottawa.

SIR.—I have the honour to submit my report for the fiscal year ended June 30, 1906.

Location.—This school is situated in the picturesque Qu'Appelle valley, 18 miles north of the Canadian Pacific railway main line, and 7 miles south of a Canadian

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Pacific railway branch line. It is not situated on a reserve, but is centrally located for the Assiniboine, Crooked Lakes, File Hills, Muscowpetung, Touchwood Hills and Sioux reserves.

Land.—The area of land belonging to this school and immediately surrounding it comprises about 509 acres, all in township 21, range 13, west of the 2nd meridian. It was specially surveyed and reserved for the purpose by the Department of the Interior, and is made up of parts of different sections; about 14 acres on the northwest corner of section 2, on which the school buildings and garden are situated, about 145 acres on the west side of section 2. This is nearly all coulee and side hills covered with scrub, but was required for a roadway to the farm on top of the hill. About 290 acres, or the east half of section 10, is badly cut up by hills and ravines, but has some arable land; it affords fair pasturage in wet seasons. Eighty acres, or the west half of the southwest quarter of section 14, is good land, but badly cut by sloughs.

Besides the above, and about 5 miles northwest of the school, we have three quarter-sections reserved for hay purposes. Of these, the northwest quarter, section 34, township 21, range 13, west of the 2nd meridian, was bought by the department for hay purposes, has some arable land, but is much broken by sloughs. The other sections are northwest quarter-section 34, township 21, range 13, both west of the 2nd meridian. All the above parcels of land are fenced with barb-wire.

Buildings.—The new school comprises three separate buildings, viz.: main building, size 120 x 50 feet, will be used for kitchen and dining-room in basement, offices and store on first floor, chapel and private rooms on second floor and hospital on third floor. The girls' building, 80 x 50 feet, is now occupied and used for play-room, dormitories and class-rooms. The boys' building is the same size as the girls' and used for the same purposes.

Accommodation.—The new school will accommodate 225 pupils and staff of 15.

Attendance.—The attendance for the year has been satisfactory. There were 203 pupils enrolled at the end of June: 88 boys and 115 girls.

Class-room Work.—The work here has been satisfactory. The grading under the schedule of studies prescribed by the department was as follows:—

	Boys.	Girls.	Total.
Standard I.	15	32	47
" II.	36	16	52
" III.	12	36	48
" IV.	25	19	44
" V.	..	12	12

The first and second standards attend class regularly for six hours each day, and are learning English rapidly. The higher standards attend class one-half day and work at the different trades the other half. Sometimes in busy seasons on the farm or in the garden all the boys are engaged at outside work under the supervision of the teachers.

Farm and Garden.—The area of land under cultivation is about 324 acres, divided as follows: 125 acres under wheat, 125 under oats and 20 under barley; 20 acres under hay and 14 under potatoes, corn, turnips, carrots, mangels and rape. About 20 boys are attached to the farm and worked as required; the other boys and girls, as their turn came, did the milking, and all assisted on the farm at busy times.

Stock.—Our stock is in fair condition, and comprises 35 head of cattle, 32 head of horses, 91 pigs and about 125 poultry.

Blacksmith-shop.—Two boys worked at this trade, and a fair amount of custom-work was done besides the work required for the school.

Shoe-shop.—Six boys are at work in this shop making and repairing boots, shoes and harness.

Bake-shop.—Four boys assist in this shop; besides doing all the baking for the institution, the slaughtering and curing of beef and pork is also done.

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Carpenter-shop.—Six boys worked in this shop. A great amount of work was done for the school and outsiders in carpentry, repairing carriages and implements; also cabinet-making.

Tinsmith-shop.—Two boys are employed here repairing and doing custom work.

Girls' Work.—Under the direction of the reverend sisters, the girls learn all kinds of housework, cooking, dairying, laundry work, and make their own clothes and also the greater part worn by the boys. They assist in the garden, milk the cows in summer and have entire charge of the poultry.

Moral and Religious Training.—The vice-principal and teachers attend to the moral training and general manners of the pupils. On Sunday, and every day during the winter months, I hold a class for the whole school, when I give religious instruction for one hour after class. Chapel is attended night and morning daily, and the Lebreton church morning and evening on Sundays.

Health and Sanitation.—The health of the pupils during the year has not been as good as previous years owing to the unsanitary conditions of the sleeping quarters since the fire. The physician in charge inspects regularly, and the health of the pupils is given the best attention that the present conditions will permit. The new building, with its improved sanitary arrangements, will greatly assist in keeping the children in good health.

Water Supply.—The water-supply is excellent. Pure water is obtained from four wells.

Fire Protection.—No system of fire-protection has yet been installed, but provision has been made for a first-class system. The girls' building (which is the only one of the new buildings occupied) is fitted up with Star chemical fire-extinguishers.

Heating and Lighting.—Stoves were used for heating the shops and temporary buildings. Gurney's one-pipe steam system will furnish heat for the new building. Coal-oil supplied light. A Siche gas system will furnish light for the new building.

Recreation.—Football and baseball are the principal sports for the boys in summer, and in winter skating and hockey. The girls play football also, which is considered a healthy exercise.

General Remarks.—Last September this school had the honour of a visit from Earl and Countess Grey, who expressed themselves as being highly pleased with its location and the general appearance of the surrounding country. Many strangers from all parts visit the school each summer.

I have, &c.,

J. HUGONARD,

Principal.

PROVINCE OF SASKATCHEWAN,

REGINA INDUSTRIAL SCHOOL,

REGINA, June 30, 1906.

FRANK PEDLEY, Esq.,

Deputy Supt. General of Indian Affairs,
Ottawa.

SIR.—I have the honour to submit my annual report for the year ended June 30, 1906.

Location.—The school is situated on the banks of the Wascana creek, 4 miles northwest of the city of Regina. It is not on an Indian reserve.

A half-section of land was originally purchased by the department for the use of the school; and in 1903 the government reserved an additional section.

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The soil is a stiff clay, which can only be worked by heavy teams. Wheat, oats, barley, vegetables and small fruits yield well. The land in its natural state was treeless prairie, and was evidently the feeding ground of great herds of buffalo. From time to time in the past maple, poplar and ash trees have been planted by the walks, roads and fences; also in belts as windbreaks about buildings and gardens. These trees are now large enough to make the school grounds much more attractive.

Buildings.—The main building is of brick, two stories high. The central part contains the office, dispensary, reception-room, dining-rooms, kitchen, store-room, sewing-room and scullery on the first floor. On the second floor are the bed-rooms for the staff, and a small dormitory for the little boys. Boys' quarters and the assembly-room are in the south wing. The boys' dormitory, clothing store-room, lockers and bath-room are on the second floor of this wing. In the north wing the girls' dormitory, bath-room and clothing store-room are on the second floor. On the first floor are two well-lighted class-rooms. The basement, which extends under the whole building, contains furnace-room, fuel-room, small cistern, and storm-sash room.

The other buildings are a two-story brick veneer principal's residence, a farm cottage, a cottage hospital, laundry, ice-house, carpenter-shop, engine-house and blacksmith-shop.

The farm buildings are: barn with horse-stable underneath, cow-stable, hog-pen, small implement-shed, and poultry-house.

Accommodation.—There is accommodation for 150 pupils, and a staff of 12.

Attendance.—During the past year the attendance was about 60.

Class-room Work.—The class-room is graded as follows:—

Standard VI.	6
“ V.	9
“ IV.	10
“ III.	15
“ II.	5
“ I.	15

The course of study outlined by the department for the use of Indian schools is followed.

Farm and Garden.—This is made the most important part of the industrial training for the boys.

The farm last year produced 2,300 bushels of wheat, 400 bushels of oats, 200 bushels of barley and 1,000 bushels of potatoes. In addition to this \$480.51 worth of hogs was raised.

The garden produced all the vegetables used on the school tables.

This year about 285 acres are under cultivation: 75 in wheat, 45 in oats, 10 acres of barley, 4 of potatoes and 6 acres of garden. A 60-acre field of brome grass supplies most of the hay. We find it an advantage to have a large summer-fallow each year.

All the threshing for the school, and the threshing for many of the neighbours, has been done for the past three years by the pupils and ex-pupils with the steam thresher owned by the school.

INDUSTRIES TAUGHT.

Farming.—All the boys are taught the care and feeding of horses, cattle and hogs, and are given practical instruction in the use of implements and garden tools.

Carpenter-shop.—Eight boys received instruction in this shop.

Printing Office.—A number of the boys have become expert typesetters. The work is useful in connection with class-room work, as it gives training in spelling and English composition.

Engine-room.—Five boys have received instruction in the care and running of the engine. One boy passed his examination before a government inspector last fall.

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and ran the school engine during threshing season. A number of the other boys are as expert. Several of the ex-pupils were running engines during last threshing season.

Bake-shop.—Boys do the baking for pupils, the bread for the staff is made by the girls; all under the direction of the cooking instructress.

Girls' Department.—All the girls learn cooking, baking and sewing, how to set and wait on tables; also laundry work. Many of the older girls cut, fit and make their own clothing with quite as much taste and neatness as white girls would do. A number of ex-pupils have gone out to service, earning best wages and giving good satisfaction.

Moral and Religious Training.—In the summer the pupils attend the Sunday morning service in the Presbyterian church, Regina. Sunday school is held in the school-room in the afternoon, and service in the evening. Every morning and evening the pupils assemble for prayers in the school-room.

Health and Sanitation.—The general health of staff and pupils has been good. Miss Dorrance, who was seamstress for a time, died at the school in January. A number of the pupils have scrofulous lumps. One boy is at present suffering from consumption. One of the pupils, Alfred Ermine, went home to the Sandy Lake reserve, Carlton agency, for holidays last summer, and while at home took sick. He never recovered, but died about Christmas. There have been no deaths of pupils at the school during the past year.

Water Supply.—The well which supplies the school has water of a very superior quality, but there was not enough of it. During the winter the department ordered a new well to be sunk; this has just been completed. The well was partly dug and partly bored; water was struck at 95 feet, and rose 45 feet in the well. As the pump has not been put in place, it is impossible to say how the supply will last, but the indications are that it will be abundant.

Fire Protection.—Hose-reels on hydrants in main halls are connected by inch and a half pipes with water tanks in the attic. There is also a McRobie fire-engine, six Stempel extinguishers, and a number of hand-grenades.

Heating and Lighting.—The main buildings are heated by steam from a thirty horse-power boiler in the basement. The laundry, carpenter-shop, printing office and bake-shop have to be heated by stoves.

The light used is acetylene gas made in a 'Siche' gas machine. The cost of lighting is more than with oil. The carbide for the manufacture of the gas is rather expensive in the west, partly due to the fact that we are required to pay double first-class freight on it.

Recreation.—During the summer the boys play football and baseball, and the girls play basket-ball. In the winter skating, hockey and coasting are the principal outdoor sports. The boys often play friendly matches of football or hockey with teams from the Royal Northwest Mounted Police barracks, which are 2 miles from the school; and also with teams from the High school and Normal school in Regina. In these games our boys have usually come out successful.

General Remarks.—The school has many visitors during the summer months. People from the eastern provinces and also from Europe who chance to be stopping over in Regina take advantage of the nearness of the school to get a glimpse of Indians and of the educational work being done among them. Many of them show surprise that all our children speak English so well; and that many of them are so apt in their studies and work.

The farm and garden contributed very much to the maintenance of the school; and also gave the boys a practical training of the kind they will need in after years.

The traction-engine has been made to do good work both in running the shop machinery and in the threshing season. It is also of great value in interesting some of the bright boys in the school work. Those who are studying steam engineering will, we are sure, be able to put their knowledge to good use when they go back to their homes.

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Two different Indian agents have written this spring asking that some of the boys from their reserves be taught engineering, as they had bought steam threshing outfits for their reserves, but thus far they had to hire outsiders to run their engines.

Some of our ex-pupils who learned printing at the school have been working on both the *Standard* and the *Leader*—Regina newspapers.

I have, &c.,

B. B. HERON,

Principal.

PROVINCE OF SASKATCHEWAN,

NORTH SASKATCHEWAN INSPECTORATE,

PRINCE ALBERT, August 30, 1906.

FRANK PEDLEY, Esq.,

Deputy Supt. General of Indian Affairs,

Ottawa.

SIR,—I have the honour to submit a report for the year ended June 30 last on the inspection of such of the schools within my inspectorate as I have been able to visit during this period.

DUCK LAKE BOARDING SCHOOL.

Though nominally a boarding school, yet in the character of the work done this institution ranks almost as an industrial school. Indeed, between these two classes of schools there is no very rigid distinction, as all the well-managed boarding schools engage as a matter of economy in the most important industries, especially those of an agricultural nature, and instruct their pupils in them.

The staff had undergone some slight changes, and at the date of inspection included Rev. O. Charlebois, as principal; Rev. A. G. Demers, assistant to principal; J. Varin, boys' guardian; Paul Grezard, carpenter and general mechanic; Claude Pollard, baker; and 13 reverend sisters, including Sister St. Basil, directress and secretary; Sister St. Augustine, teacher of senior division; Sister Mary of the Cross, teacher of junior division; Sister St. Hyacinthe, nurse; Sister St. Emerence, care of dormitories; Sister Solange, girls' seamstress; Sister Isidore, boys' seamstress; Sister Martha and Veronica, cooking; Sisters Honore and Telesphore, general housework, and Sisters Valerie and Bernardine, laundry work, dairying and care of poultry.

With a staff so complete, its members well skilled in their several duties, and with thorough organization throughout all departments, a high state of efficiency and economy prevails.

The authorized attendance for the school is 100 pupils, and the register shows as follows:—

Enrolled January 1, 1905.. . . .	101	
Admitted since.. . . .	6	
Total.. . . .	—	107
Discharged, course completed.. . . .	1	
“ account of ill health	2	
“ “ incapacity.. . . .	1	
Died.. . . .	1	
Deduct.. . . .	—	5
Enrolled January 1, 1906.. . . .		102

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This attendance is derived from the following sources:—

From Beardy's and Okemahsis' bands.	27
“ Petaquakey's band.	23
“ One Arrow's band.	22
“ six other bands.	15
“ non-treaty.	15

Accordingly, the three bands which this school was primarily intended to serve contribute over 80 per cent of the treaty pupils, or about 70 per cent of the entire attendance.

In their class work the pupils are graded as follows:—

Standard I.	26
“ II.	23
“ III.	27
“ IV.	9
“ V.	12
“ VI.	5

Sister Mary of the Trinity, formerly teacher of the senior division, having qualified according to the public school regulations, has taken a position in the public school at Duck Lake. Normal trained teachers are needed quite as much in our Indian schools as in the schools for white children; but fortunately the vacancy has in this instance been filled by a sister of very marked ability who has recently arrived from the United States. Sister St. Augustine has no duties other than those of teaching, and the opportunity thus afforded for preparation for each day's work is turned to the best account. A uniform and satisfactory progress has been made. In the primary division the methods are well adapted to the character of the work, and the pupils are kept as well employed as children of their age can be, by means of slate exercises and other busy-work of much variety.

The discipline in both divisions, as throughout all the work of the institution, is very good. Corporal punishment is rarely resorted to, and by careful and constant supervision the necessity for it is avoided. The children are evidently contented and pleased with their surroundings, and on suitable occasions a special effort has been made to relieve the monotony of school life and to render it interesting and attractive.

The class-rooms are spacious, well lighted, and furnished with everything essential to successful work, including a complete outfit of patent desks, stationery cupboard, extensive blackboard, all necessary maps, a globe of the world, and a moulding board for illustrating the earth's surface to beginners. The walls, which are finished with lumber, dressed and painted, are appropriately decorated with maps, cards, pictures and paper-work, this last the hand-work of the junior pupils, as well as with numerous flower-pots arranged on brackets around the windows.

The dormitories are properly furnished, well arranged and clean. The larger, occupied by the girls, affords six hundred cubic feet of air space per pupil, and is in a sanitary condition in every respect. The boys' dormitory affords only half this space proportionately, and is quite overcrowded.

In connection with the training of the girls in the household industries, the most remarkable results are found in the sewing-room, where pupils from six years up are taught sewing and knitting suited to their age. The work of the seniors in the making of new garments and the repairing of old ones is something surprising, and for about a year before leaving school they are instructed in the cutting of both men's and women's garments, in which also they show fair skill.

The cooking, under the direction of two sisters of experience, is managed with skill and economy. The children's tables are supervised by the sisters personally, and are well provided with food of wholesome quality.

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The farming, gardening and dairying industries contribute increasingly toward the maintenance of the school. The following food products, which is an incomplete list, may serve to illustrate the benefits derived from these sources: beef, 3,215 pounds; pork, 3,118 pounds; chickens, dressed, 160 pounds; turkeys, dressed, 75 pounds; ducks, dressed, 50 pounds; butter, 1,090 pounds, and eggs, 550 dozen.

At the agricultural exhibition held at Duck Lake in September last the school obtained twenty-eight first prizes and seven second for the products of various industries.

During the past year a soft-water cistern of a capacity of about 3,000 gallons has been constructed, the material used being brick and cement. It will be supplied from the spacious roof of the main building, with which it is connected by a large pipe.

EMMANUEL COLLEGE.

Besides performing to a limited extent the functions of an industrial school, Emmanuel college has from its foundation been designed for the training of teachers for Indian schools, and in a certain measure its duties in this regard have been successfully fulfilled.

At frequent intervals I have made brief visits to the school, but the regular inspection was made on February 21 to 23.

The staff comprised Rev. James Taylor, as principal; J. Corrigan, supervisor of boys' work; Alex. Ahenakew, substitute teacher; Miss C. Sutherland, matron; Miss E. J. Jones, cook, and Mrs. Corrigan, housekeeper and laundress.

The authorized attendance of the school is 52 pupils, and is fully maintained, as is shown by the following statement:—

Pupils enrolled at December 31, 1904...	51	
Admitted during year...	7	
Total...	—	58
Discharged, course completed...	3	
Died...	1	
Deduct...	—	4
Enrolled at December 31, 1905...		54

In class work the pupils are graded thus:—

Standard I.	17
“ II.	13
“ III.	14
“ IV.	4
“ V.	6

The teacher who was in charge of the classes as substitute, pending the appointment of a duly qualified teacher, is a graduate of the school, holding a second-class non-professional certificate, but without experience or special training for the work. As might be expected, the condition of the work was not as satisfactory as it had been for some time previously under Mr. Elliott, who accomplished excellent results throughout all the standards.

The class-room was of suitable dimensions and properly furnished. The stationery was sufficient and was kept in good order.

The health of the pupils has been remarkably good during the year, so far as diseases in an acute form are concerned. There are, however, the usual cases of swollen glands, which are always most noticeable in the latter part of winter, indicating the effect of the winter's confinement upon the development of this prevalent disease, and the absolute necessity for the most perfect ventilation possible.

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The attendance of girls is somewhat larger than formerly, and the dormitory space amounts to less than two hundred cubic feet per pupil, while the facilities for changing the air are not the best.

The boys' residence affords abundant space and fair ventilation, but it is entirely out of repair. The question of abandoning it and replacing it by a new one, or by an equivalent addition to the main building, is under consideration.

It seemed probable the school would this year be able to live within its revenue. The expenses, however, are heavy in proportion to the attendance and to the grant earned. Salaries amount to \$37 per pupil per annum, and provisions to \$45. Considerable assistance is received, in cash and clothing, from various organizations of the Church of England, which substantially supplements the government grant.

JOHN SMITH'S DAY SCHOOL.

This school was inspected on January 13.

The number of pupils present was 5, and the number enrolled was 18. The school was open for 178 days during the preceding twelve months, and the average attendance for these days was nearly 7.

Of the pupils enrolled 13 were in standard I, 3 in standard II and 2 in standard III.

The teacher at that time was William Tomalin, a young man of fair ability and sufficient scholarship, but without special training for his duties. Attention and interest were only fair, as also the progress of the pupils and the general tone of the work.

The building is a particularly good and comfortable one, 30 x 24 feet and 16-foot ceiling, with good porch, all on stone foundation, properly finished in every respect and painted.

The school grounds comprise one acre, neatly fenced, clean, level, and well drained.

At the end of December Mr. Tomalin was transferred to the Church of England boarding school at Onion Lake, and was replaced here by Edward Ahenakew, a graduate of Emmanuel college, who has a very creditable school record, but is also without training and experience in teaching.

JAMES SMITH'S DAY SCHOOL, NORTH.

This school was inspected on January 18.

There were 8 pupils present and 30 enrolled.

There were 207 days of school in the twelve months to December 31, and the average attendance for that time was 8 pupils daily.

Of the pupils present all were in the first standard; and of those enrolled 29 were in standard I, and 1 in standard II.

The teacher at that date, Mr. D. McDonald, who had been five years in this school, has since been succeeded by Alex. Ahenakew, an ex-pupil of Emmanuel college. The results of school work here are somewhat better than the grading of the pupils would indicate, but yet they are trivial as compared with the opportunities afforded.

Progress is but slight, though the pupils show fair intelligence and are rather promising material. The attendance is irregular, though all live within a reasonable distance from the school.

The school is built of logs, and is plastered inside and outside, ceiled and painted, and generally in good repair.

JAMES SMITH'S DAY SCHOOL, SOUTH.

This school was opened about two years ago for the Bighead section of the band. It was inspected on January 19.

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There were present 12 pupils and 18 enrolled. School had been held 194 days in twelve months, and the daily average attendance for that period was nearly 11.

The pupils are all graded in standard I, but there are two divisions, the senior doing much of the work of the second standard.

Mrs. Godfrey has had elementary training and some experience in public school work. She is diligent in devising methods and skilful in applying them, and consequently successful in arousing to activity the minds of her pupils. The results achieved are of a varied character and much greater than is indicated by the grading.

The building has recently been plastered inside and outside, and is now quite comfortable, except that it has but a single floor. It has a suitable porch and is ceiled and painted.

The site comprises a portion of rising ground, of about an acre in extent. It was as yet unfenced, but the material for a fence was on hand.

This school is giving a good return for the money expended in its maintenance. Its influence is distinctly noticeable in the homes of the Indians.

It happened that on the evening of the 19th, the day of inspection, a programme had been arranged, in connection with which a Christmas-tree was held, the presents being mainly provided from money won as prizes for school work at the Winnipeg exhibition. There was a good attendance of Indians from both sections of the band, who in dress and conduct presented a very respectable appearance, while the children performed their parts creditably. Such things have a civilizing influence, and are an excellent substitute for the older forms of diversion among them.

MISTAWASIS' DAY SCHOOL.

The school was inspected on April 6.

There were 17 pupils enrolled, and 11 present on the day of inspection, besides as many non-treaty children. There were 169 days of school in the past twelve months, and the daily average attendance for this period was 10 pupils.

The pupils enrolled are graded as follows:—

	Treaty.	Non-treaty.	Total.
Standard I.	9	2	11
“ II.	4	1	5
“ III.	3	2	5
“ IV.	—	—	—
“ V.	1	3	4
“ VI.	—	2	2
Total.	17	10	27

During the whole of the quarter ended September 30 the school was closed. Since that date it has been conducted by the Rev. C. W. Bryden, B.A., whose scholarship and professional training are of a superior order. The present condition of the classes is quite satisfactory.

Throughout the reserve, also, I have observed, as an evidence of the work of former teachers, that the children in their homes and when met upon the road are mannerly, use the English they have learned at school, and reply freely to questions that are asked them. In this connection, one ex-pupil, Willie Muchahoo, deserves special mention as illustrating the results that can be achieved in a day school when teachers of the right class, properly trained and devoted to their duties, are employed. This young man never attended school elsewhere nor lived abroad from the reserve, yet his education is of a practical and useful character, and is turned to account every day. He has recently married a young woman from the Battleford industrial school, who makes a very suitable wife. They are as yet only twenty years of age, but are likely to be an example of much value to other young couples on the reserve.

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Provision has been made for plastering the building, which should make it comfortable. The space and accommodation are barely sufficient for the attendance, but by close attention good ventilation is secured.

AHTAHKAKOOP'S DAY SCHOOL.

The inspection of this school was made on April 4 and 30. On the former date there were but 5 pupils present, owing to unfavourable weather, but on the latter there were 11.

During the twelve months ended March 31 there were 212 days of school, and the average attendance was a little over 10 pupils daily, or sixty-five per cent of the number enrolled.

The teacher is Louis Ahenakew, a member and councillor of the band, and a man of fair scholarship, ability and experience.

The pupils are graded thus: standard I, 11; standard II, 3; standard III, 2. The progress of the pupils and the actual condition of the work are satisfactory.

The building is a log-frame on stone foundation. It is finished inside with good floor, wainscot, lath and plaster, and ceiled with v-joint. Here also provision has been made for willowing and plastering outside this season, and the building will then be one of the best.

Here as in many other places the teacher has difficulty in securing from the Indians a free supply of wood, which they are expected to provide as their contribution toward the maintenance of the school.

BIG RIVER DAY SCHOOL.

This school was visited on April 2 and 3, and there were 5 pupils present and 9 enrolled. In the year ended March 31 there were 217 days of school, and an average attendance of nearly 5 pupils daily.

The teacher is William Bear, an ex-pupil of the Battleford industrial school. He is a very exemplary young man, and exerts a good influence among the Indians. He has fair scholarship, but no special training and but limited experience.

The attendance is small and irregular, and the children, some of whom live at a distance, come to school at almost any hour in the forenoon. The progress is, in consequence, but slight. The pupils are graded thus: standard I, 5; standard II, 4.

The sweeping and scrubbing of the floor had been attended to regularly, but the washing of windows and wainscoting and the dusting of furniture had been neglected.

The grounds are clean and attractive, a clear, level plain, skirted on three sides with jack pine and other evergreen trees, and overlooking a beautiful lake at a distance of sixty yards from the school door.

STURGEON LAKE DAY SCHOOL.

I visited this school on April 26.

There were 8 pupils present and 11 enrolled. There had been 205 days of school in twelve months, and an average attendance of 6 pupils daily.

The teacher is Robert Bear, a member of John Smith's band, who has had charge of this school now for five years. He is a man of experience, and of influence with the Indians, old and young, but his success in the school-room is indifferent. His manner is languid, and his methods are unstudied. The teacher's grading of the pupils enrolled was as follows, but is somewhat above their actual attainments: standard I, 4; standard II, 5; standard III, 2. It must be said, however, that the tone of the work was improved since last inspection.

The building is new, but roughly constructed and finished. Some repairs are now being made to render it more comfortable.

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The text-books and stationery were in good order. An excellent hyloplate black-board has replaced the former rough, wooden one.

SIOUX MISSION (WAHSPATON) DAY SCHOOL.

This school was inspected on April 20.

There were 4 pupils present and 7 enrolled, the total number of school age on the reserve. There were 179 days of school in twelve months and an average attendance of 5 pupils daily.

The teacher is J. Beverley, who took up his duties here as farmer and missionary-teacher in October last. He has but slight knowledge of actual school methods and management, and no former experience, but he manifests a deep interest in his work, which counts for much, and with diligence he may accomplish much good.

The school is a very roughly finished log building, with walls merely pointed and whitewashed, ceiling of shrunken ship-lap, and foundation badly decayed. But the attendance is small and uncertain, and the advisability of erecting a better building is therefore doubtful.

MONTREAL LAKE DAY SCHOOL.

The inspection of this school was made on August 23.

The enrolment includes 24 boys and 25 girls; total 49. There were present 17 boys and 17 girls; total 34. There were 260 school days in the year ended June 30, and the average attendance for that period was 14 pupils daily. The average for July and August was 29, this being the time of the year when the whole band for the most part gathers at this point.

The pupils enrolled are graded as follows: standard I, 35; standard II, 5; standard III, 6.

Mr. J. R. Settee, the teacher, has been in charge of this school for the past seven years. In addition to his duties as teacher he is overseer of the band, and does certain missionary work for the Church of England. The merely educational results of his efforts are very slight, so far as they can be tested by examination or discovered within the school-room; yet it cannot fail to be recognized that there is a certain indefinable influence emanating from the school and exerted upon the older as well as the young which is of much value.

The building has been erected during the past year, a log building, well built, of timber, spruce and tamarack, skilfully dressed and cornered. It is not entirely finished, but the material required for its completion is on hand.

The surroundings could be greatly improved, covered as the premises are with sticks, stumps and bushes. At fifty yards distance the tall forest begins.

GENERAL REMARKS.

The schools of the Battleford and Onion Lake agencies were not visited by me during the past year.

I have, &c.,

W. J. CHISHOLM,

Inspector of Indian Agencies.

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SOUTH SASKATCHEWAN INSPECTORATE,
BALCARRES, SASK., July 23, 1906.

FRANK PEDLEY, Esq.,
Deputy Supt. General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit the following report on the day, boarding and industrial schools in this inspectorate for the year ended June 30, 1906.

I regret that owing to a large amount of special work being given to me to look after, I was unable to visit all the schools in this inspectorate. I was, however, able to visit most of the schools in the district, and those not inspected within the year will be inspected in the near future.

DAY STAR'S DAY SCHOOL.

This day school is under the auspices of the Church of England, and is situated on Day Star's reserve in the Touchwood agency. The school is taught by Mrs. A. M. Smythe. At the time of my inspection, which was early in March, there were 13 children in the class-room. There were 14 enrolled, with an average attendance of 13, so it will be seen the attendance has been exceptionally good.

I found the children very bright and healthy. They spoke out well and were well advanced in their studies.

There has been a decided improvement in this school since my last visit. The Indians of the reserve are quite proud of their day school, and the good attendance goes to show that they take an interest in it.

GORDON'S BOARDING SCHOOL.

This school is situated on George Gordon's reserve, in the Touchwood agency, and is under the auspices of the Church of England.

The school is under the management of the Rev. J. W. Harrison, who has a staff of four.

I inspected the school on March 14 last. At that time there were 28 children in the class-room, and I regret to say that they were not as far advanced with their studies as they should have been.

An epidemic of scarlet fever broke out in the school in November last. There were eight cases in all, but I am happy to say none terminated fatally.

On November 24 the institution was put under quarantine, which was not raised till February 3. Dr. Harvey, the medical officer of the agency, attended to the work.

The school had a fair garden last year; plenty of carrots, turnips and beets, but there was a shortage of potatoes. On the small farm 300 bushels of oats were produced.

The children of the school were well clad and well fed.

MUSCOWEQUAN'S BOARDING SCHOOL.

This boarding school is situated on Muscowequan's reserve, in the Touchwood agency, and is under the auspices of the Roman Catholic Church. The Rev. J. Magnan is the principal, and has a staff of 5.

I inspected the school on March 19 last.

I made a thorough inspection of the interior of the school, and everything is in first-class order. Classes are held regularly, and there has been a decided advance-

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ment since my last inspection. Rev. Sister Riorden has had Normal training, and is bringing her classes along well. Great attention is given to housekeeping and sewing.

From the middle of May till the middle of October 1,400 pounds of butter were made in this school. One thousand pounds of this were used in the school, and the balance sold to white customers.

I found the stables in excellent condition. About 80 head of cattle and 10 head of horses are stabled. The work is done by the boys under the direction of the farm instructor. Twenty-four cows are milked daily.

Since my last inspection a fine new stable has been built. The work for the most part was done by the boys.

The school had an excellent garden, and as a result there has been an abundance for the house and stables, and a large quantity was sold.

On August 7 a disastrous hail-storm passed over the district, and wiped out the entire crop of 22 acres of excellent wheat and 30 acres of oats.

I was at the school early in the season, and this was one of the finest crops I had seen in the whole country. The wheat promised to yield 30 bushels to the acre, and the oats 70 bushels.

The loss sustained through the storm was a severe one for the school.

It was a pleasure for me to inspect this school, as I found everything in such good condition. The children were bright, happy and well clad. The institution, as a whole, presented a business-like appearance.

CROWSTAND BOARDING SCHOOL.

This school is situated in the Pelly agency, near Kamsack, on the Canadian Northern railway.

The school is under the auspices of the Presbyterian Church, and is managed by the Rev. Mr. McWhinney, with a staff of five.

I inspected the school on April 3 last. At the time of my visit there were 48 children in the institution,—21 girls and 27 boys.

I heard the children go through their different exercises, and found them very bright, particularly in spelling and arithmetic. Miss McLaren, their teacher, has succeeded in getting the children to speak out well.

The larger girls assist in the kitchen and sewing-room in turns, and are given a thorough training in general housework. The girls do the milking in the summer months.

From June 1 to December 1, last, 800 pounds of butter were made at this school by the girls. All the bread baked in the institution was baked by the girls, and the department can rest assured that the Indian girls in this institution are getting a training that will fit them to be good farmers' wives when they return home.

The boys are taught all branches of farming under a competent farming instructor. The farm is well managed and the training the boys receive could not be improved on. The school farm is the model farm of the district.

Last year's crop threshed out 823 bushels of wheat, 1,400 bushels of oats and 125 bushels of barley. The wheat averaged 35 bushels to the acre, and was first-class in quality. The oats averaged 40 bushels to the acre, and were first-class.

The school had a splendid garden last year, which produced ample vegetables to carry it over the year.

Since my last inspection of this school a number of improvements have been made. A fine dwelling-house for the principal has been completed, an addition has been added to the main building, and a granary, 30 x 20 feet, has been built.

The building and premises, and in fact everything about the school, presented a neat and business-like appearance.

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ST. PHILIP'S BOARDING SCHOOL.

This school is situated on Keeseekoose reserve, in the Pelly agency, and is under the auspices of the Roman Catholic Church.

The school is managed by the Rev. Father DeCorby, with a staff of four. As the school was opened only a few months before my inspection, much could not be expected; however, classes were being held regularly, and a man was employed breaking up a new farm, which will be seeded next year.

I found 31 children enrolled. Many of these children were quite young, and were just beginning to speak English.

The main building of the school is a log structure, 60 x 25 feet, with a wing behind, and a detached building, 24 x 24 feet, used by the principal as living quarters.

I found the building and the premises neat and tidy.

KEY'S DAY SCHOOL.

This day school is situated on the Key's reserve, in the Pelly agency. At the time of my inspection there were only 5 children attending school, although the record showed 18 enrolled. I was disappointed at seeing such a small attendance, which I am told was due to the fact that the parents were away hunting, and of course took their children with them.

The school-room was neat and tidy.

WHITE BEAR'S DAY SCHOOL.

This small day school is situated on White Bear's reserve, in Moose Mountain agency, and is under the auspices of the Presbyterian Church.

I visited the school early in May, and found 7 children in the class-room, although the record showed 11 enrolled.

There has been advancement in the classes since my last visit. I found the children neat and clean.

There has been a change of teachers since my last visit. Miss Scott retired early in the spring, and her place was taken by Miss Armstrong.

I have, &c.,

W. M. GRAHAM,

Inspector of Indian Agencies.

PROVINCE OF ALBERTA,

BLOOD C.E. (ST. PAUL'S) BOARDING SCHOOL,

FORT MACLEOD, ALTA., July 31, 1906.

FRANK PEDLEY, Esq.,

Deputy Supt. General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit the following report for the year ended June 30, 1906.

Location.—The Blood (St. Paul's) Church of England boarding school is situated some 16 miles southeast of Macleod, which is our post office. The school is opposite the agency, and is separated from the reserve by the Belly river.

Land.—The land, which comprises 160 acres, is owned by the Church Missionary Society, London, England. A more desirable site for a school could not be had; the

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natural features are charming, and there is plenty of scope for one fond of arboriculture and landscape gardening. The soil is sandy, and is well adapted for this work.

Buildings.—The buildings are placed in the form of a square, and were freshly painted last year.

Accommodation.—There is ample room for 80 pupils and a staff of 9.

Attendance.—This has been very regular. The number of pupils on the roll at the end of the fiscal year was 19 boys and 20 girls.

Class-room Work.—The school work has been satisfactory. The girls have made the greater advance; their receptive faculties are better than those of the boys.

Farm and Garden.—About 28 acres were under cultivation, and the crops were good. The flower gardens, which were newly laid out in the spring, gave an abundance of luxuriant flowers, and the nursery, in which two thousand saplings were planted, did well.

Industries Taught.—The boys learn farming and gardening. The girls are instructed in housekeeping, cooking, dairying and dressmaking.

Moral and Religious Training.—The pupils are taught to distinguish between right and wrong, and everything is being done to make them self-reliant—a task which is by no means easy. The moral tone of the school during the year has been very fair.

Matins and evensong are said daily, and the pupils are instructed in Bible and church history by the principal.

Health and Sanitation.—The school suffered from an epidemic in the spring, attacking both staff and pupils. Grippe, together with pneumonia, caused much anxiety, and the school was most fortunate in not losing more than one little boy, who was delicate, and had not the stamina to fight an ordinary sickness. The general health, however, was excellent.

Everything is done that is possible from a sanitary standpoint. Pits are disinfected regularly, and order and cleanliness inculcated.

Water Supply.—The water-supply is excellent. There are wells in the rectory, girls' home and hospital, and one in the yard of the boys. A windmill pumps water from another well in the garden.

Fire Protection.—This institution has nine fire-buckets and four axes. The buildings are insured.

Heating and Lighting.—The buildings are heated with furnaces and stoves.

The oil-lamp is used; it is carefully handled, and as the lamps are trimmed and filled every day when in use, there is the minimum of danger from explosion.

Recreation.—Every attention is given to this. Fresh air and exercise is the best tonic for all children.

General Remarks.—The work during the year has been very gratifying. The pupils have been happy, and there are signs of a general improvement.

I have, &c.,

GERVASE EDWARD GALE,

Principal.

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PROVINCE OF ALBERTA,
BLOOD R.C. BOARDING SCHOOL,
STAND-OFF, ALTA., July 2, 1906.

FRANK PEDLEY, Esq.,
Deputy Supt. General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my annual report for the fiscal year ended June 30, 1906.

Location.—The school is situated about 22 miles south of Macleod, 1 mile from the upper agency, within a few yards of the Belly river, on the Blood reserve.

Land.—The land connected with the school belongs to the reserve. A few acres have been fenced off, portions of which are under cultivation.

Buildings.—The buildings are as follows: the main building, 36 x 36 feet, three stories high, with two wings, each 36 x 32 feet, and two stories high, the said building being divided into an office, parlour, refectory, class-room, working-room, and two recreation-rooms, on the ground floor; boys' and girls' dormitories, the chapel and private apartments for the staff on the second story. There is also situated behind the main building and adjacent to it, a three-story building, 20 x 20 feet, comprising kitchen and pantries and two large rooms reserved for the use of the sisters. The other buildings are a laundry, 18 x 26 feet, a storehouse and a stable.

Accommodation.—There is accommodation for 60 pupils and a staff of 10.

Attendance.—There are 40 children on the roll,—17 boys and 23 girls.

Class-room Work.—The programme of studies prescribed by the department is followed as closely as possible. The progress is good and encouraging.

Farm and Garden.—About two acres are cultivated as a garden, and potatoes, turnips, carrots, cabbage, &c., are successfully grown. Both boys and girls take part in the work, under the supervision of the sisters.

Industries Taught.—Gardening, stable work, milking, baking, glazing and sawing and splitting wood for the kitchen form the principal manual occupations of the boys. The girls are trained in all the branches of domestic work, baking, cooking, laundrying, sewing, knitting, dressmaking, &c. All the children's clothing is made in the school.

Moral and Religious Training.—Great care and special attention are given to this most important part of education. Religious instruction is given daily by the priest and the teacher, and morning and evening devotions are attended in the chapel. It is very encouraging to see how many great efforts the children make in order to put in practice the lessons they are taught.

Health and Sanitation.—One girl died last January of consumption, and one boy died of pneumonia in April, and another boy had to be discharged on account of being affected with tuberculosis. With those exceptions, the health of the children has been good.

The sanitary conditions are looked after carefully, the ventilation is excellent, and everything is kept clean around the house and the outbuildings. The pupils get as much outdoor exercise as is practicable, and frequent baths are taken.

Water Supply.—Plenty of good water is supplied from a well nearby.

Fire Protection.—Five fire-extinguishers, four hand-grenades, a few fire-pails and four fireman's axes are distributed throughout the halls and the rooms.

Heating and Lighting.—The school is heated with two hot-air furnaces, and light is supplied by coal-oil lamps.

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Recreation.—Recreation is taken three times a day, after each meal. Football, swimming, fishing, shooting with bows and arrows, swinging and skating, are the favourite pastimes of the boys. The girls, too, have different little games, besides swinging, playing ball and skipping.

Boys and girls have each their own playground, and are always under the supervision of an attendant.

I have, &c.,

J. L. LEVERN, O.M.I.,
Principal.

PROVINCE OF ALBERTA,
BLUE QUILL'S BOARDING SCHOOL,
SADDLE LAKE, June 30, 1906.

FRANK PEDLEY, Esq.,
Deputy Supt. General of Indian Affairs,
Ottawa.

SIR.—I beg to forward the annual report of our school for the fiscal year ended June 30, 1906.

Location.—The school is situated about 6 miles southwest of Saddle lake, and one mile north of the Saskatchewan river, on the Edmonton road.

Buildings.—The school is a frame building, 60 x 30 feet, two and a half stories high, and to this is attached a kitchen and pantry. The outbuildings consist of a bakery, laundry, storehouse, stables and several smaller buildings.

Attendance.—The attendance has been regular, as all are boarders at the institute.

Class-room Work.—The course of studies authorized by the department is faithfully followed.

Garden.—About six acres are under cultivation. Vegetables are the chief products.

Industries Taught.—The boys saw and chop the wood required for fuel, and bake their own bread. They help in caring for the horses, cattle, pigs and poultry. They also keep their rooms in order. The girls are taught sewing, cooking and laundry work; also carding, spinning, knitting and fancy-work.

Moral and Religious Training.—Special care is paid to moral and religious training. The conduct of the pupils has been very satisfactory.

Health and Sanitation.—The general health has been good. One girl was discharged on account of her weak state of health.

Fire Protection.—Four chemical fire-extinguishers, ladders and pails are kept in readiness.

Heating and Lighting.—The buildings are all heated with stoves. Light is supplied from coal-oil lamps.

Water Supply.—A sufficient supply of water is obtained from four wells near the building.

Recreation.—The favourite amusement for the boys is football. The girls enjoy swinging, skipping and handball. When the weather permits, an hour's walk is taken almost every day.

I have, &c.,

LEON BALTER,
Principal.

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PROVINCE OF ALBERTA,
CROWFOOT BOARDING SCHOOL,
BLACKFOOT RESERVE, GLEICHEN P.O., July 13, 1906.

FRANK PEDLEY, Esq.,
Deputy Supt. General of Indian Affairs,
Ottawa.

SIR,—I have the honour to forward, together with the financial statement, the annual report of the Crowfoot boarding school for the year ended June 30, 1906.

Location.—This school is situated some 10 miles from Gleichen post office, within a few yards of the Bow river.

Land.—There are about 10 acres under cultivation for the use of the school. It is government land, being a part of the reserve, and is fenced in with the permission of the department and the consent of the Indians.

Buildings.—The main building, 36 x 36 feet, is three stories high, the third story of which is not yet completed. There are two wings to the main building, two stories high, 36 x 32 feet. Behind the main building and adjacent to it is a two-story building, 50 x 20 feet. The buildings are divided into an office, reception-room, dining-room, kitchen, pantry, milk-house, storehouse, laundry, school-room, sewing and recreation-rooms on the ground floor, while upstairs are the dormitories, chapel, dining-room for the staff and two rooms used for hospital purposes in case of any contagious disease. The outbuildings are a log stable, with frame roof, 48 x 16 feet, and a root-house. A well kept picket fence surrounds the main building, and an ordinary wire fence serves for the same purpose around the garden, pasture and field.

Accommodation.—Under present arrangements, there is accommodation for 60 pupils and a staff of 8 or 10.

Attendance.—The pupils attend school regularly, all being boarders at the institute. The present attendance is 33.

Class-room Work.—The programme of studies prescribed by the department is followed. The subjects taught are: religious instruction, reading, writing, spelling, arithmetic, geography, grammar, drawing and vocal music. Progress is noticeable, and examinations have been satisfactory so far. The pupils speak English, and seem to take interest in so doing; they pronounce fairly well, notwithstanding the difficulty they have in doing so, on account of the difference in accent between it and their own language.

Farm and Garden.—Up to the present very little farming has been done; the garden and potato-field give enough work to the pupils during the summer. The garden provides sufficient supply of potatoes and other vegetables for the year. Some sixty tons of hay have been made by the pupils during the vacation.

Industries Taught.—The boys have special hours for manual work; they help in caring for the horses and cattle during the winter, and in the summer they work in the garden, and make hay. The girls are taught general housework, cooking, baking, sewing, knitting, mending of the clothes, &c.

Moral and Religious Training.—Instruction in the Roman Catholic faith is imparted to the pupils, morning and evening prayers are said, and half an hour each day is devoted to religious instruction; and I am glad to note that the pupils profit by the morals taught them.

Health and Sanitation.—The general health has been very good; the sanitary conditions are looked after carefully, everything is cleaned around the place and the outbuildings as well. During vacation the children go out camping at a short distance from the school. The big boys are employed making hay, while the little ones

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pick up berries and catch gophers. The girls have a separate camp in another place under the supervision of two attendants.

Water Supply.—The water required is supplied by means of a pump from a well dug close to the kitchen. There are eave-troughs around the building to catch the rain-water, which runs into a concrete cement cistern built under the laundry, which provides soft water for washing purposes.

Fire Protection.—Fire-extinguishers, hand-grenades, fire-pails and fire-axes are distributed throughout the halls and rooms. There is a well near the building, but it would not provide a sufficient supply of water in case of fire. There is no tank in the house up to the present.

Heating and Lighting.—The school is heated partly by stoves, partly by a hot-air furnace. The buildings are lighted by coal-oil lamps.

Recreation.—Football, shooting with bows and arrows, riding and fishing form the favourite pastime of the boys. The girls amuse themselves playing ball, dressing dolls, &c. Recreation is allowed three times a day after each meal, and is taken outside in good weather or in indoor games in bad weather, always under the supervision of an attendant.

Trusting this report will be satisfactory.

I have, &c.,

J. RIOU, O.M.I.,

Principal.

PROVINCE OF ALBERTA,

ERMINESKIN'S BOARDING SCHOOL,

HOBBEWA, July 6, 1906.

FRANK PEDLEY, Esq.,

Deputy Supt. General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my annual report for the year ended June 30, 1906.

Location.—The school is situated on the Ermineskin reserve, at about a mile from the station of Hobbema, in the province of Alberta. There is no post office.

Land.—About 22 acres of land were added this year to the 20 acres already in use for the wants of the mission; 5 are taken up for the garden, 5 for the yard and the rest for pasturage. All is well fenced.

Buildings.—The main building, 40 x 50 feet, is three stories high; school-room and refectory on first floor, boys' dormitory, sewing-room and infirmary on second floor, girls' dormitory on third. Another structure, 25 x 20 feet, containing a kitchen and chapel, joins the main building to that of the sisters. We were obliged to erect a new laundry this year, the old one being nothing but a ruin. The inspector advised us to do so, for the health of the children suffered much from it. It is 40 x 24 feet, and is divided as follows: wash-room, 24 x 18 feet; store-room, 9 x 12 feet; ice-room, 9 x 12 feet; three bath-rooms, each 5 x 7; passage, 4. On the second floor is a room for drying and ironing clothes, and one in case of contagious diseases.

Accommodation.—There is accommodation for 75 children and 10 sisters.

Attendance.—The average attendance was 50.

Class-room Work.—The following statement will show how the pupils stand in their studies:—

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“ III.	8
“ IV.	9
“ V.	5
“ VI.	2

The strictest attention is paid to the instruction of the children, and we can say that they reward our care, for they are fond of study, and they have made marked progress in the different branches of the programme given by the department, especially in arithmetic.

Farm and Garden.—Our garden giving us a very satisfactory result, we have enlarged it by two acres.

Industries Taught.—The boys have the care of the garden, yards and cattle; they saw the wood and do the work in their respective rooms. The girls are taught the making and mending of their clothes and other needle-work; besides they learn the kitchen work and how to keep a house in good order.

Moral and Religious Training.—The children pay great attention to the religious instruction given them daily by the missionary and the teacher. We are in general satisfied with their conduct.

Health and Sanitation.—There has been no alarming illness during the year, excepting one case of consumption. In November a strange case of illness occurred in our school; fearing it might be contagious, we immediately isolated the few children who had it, but after a few days we found out that it was nothing serious.

Water Supply.—Water is obtained from two wells in close proximity to the house, and reaches us by means of a fixed pump in the kitchen.

Fire Protection.—Barrels at hand and constantly filled with water, and ladders attached to the houses, are our means of protection against fire. We are to receive very soon fire-escapes, ‘l’Universel.’

Heating and Lighting.—Our rooms are lighted by lamps and heated by wood stoves. We always hope that the department will assist us in granting us furnaces, for wood is becoming more and more scarce.

Recreation.—Recreation is regarded as important as shown by the care and trouble that we take in giving amusements to the children. A brass band for the boys, and quite a number of mandolins for the girls, were given by persons interested in the welfare of the children in order to procure them agreeable recreation, for they are so fond of music. We find it is a great benefit for their moral welfare. Outdoor exercise is also given them as much as possible.

I have, &c.,

L. DAUPHIN, O.M.I., priest,

Principal.

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PROVINCE OF ALBERTA,
FORT CHIPEWYAN (HOLY ANGELS') BOARDING SCHOOL,
NATIVITY MISSION, FORT CHIPEWYAN,
ATHABASCA LAKE, July 1, 1906.

FRANK PEDLEY, Esq.,
Deputy Supt. General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my annual report for the fiscal year ended June 30, 1906.

Location.—Our school is built on the north shore of the lake. The location is healthy; the view of country and lake very fine.

Land.—With the exception of 15 acres, the land surrounding the school is altogether unfit for farming purposes, the soil being too rocky and barren.

Buildings.—The old building, 30 x 35 feet, has been enlarged and raised on new foundations. Two wings, 35 x 42 feet, make a spacious building fitted with many improvements hitherto unknown in this country.

A full description of the school has already been given in one of my preceding reports. Since that time it is partly finished, galleries and paint contributing greatly to set off the exterior. The work in the interior of the house is still going on with success. The following rooms are finished: a kitchen, dining-rooms for the staff (the community), a class-room, boys' and girls' dormitories; the whole nicely painted and well ventilated.

Accommodation.—There is accommodation for a staff of 13 members and sufficient space in dormitories, refectories and class-rooms for 60 pupils.

Attendance.—School has been kept regularly, except on authorized holidays.

Class-room Work.—The subjects taught are reading, writing, grammar, arithmetic, history, geography and ethics. Vocal music and lessons in calisthenics, gymnastic drills, wand and dumb-bell exercises are given to the pupils, who take great interest in them.

Farm and Garden.—The children weed the garden and field.

Industries Taught.—Labour hours are spent by the boys in sawing and splitting fuel and other little choring. The girls are taught sewing, knitting, darning, embroidery and cooking.

Moral and Religious Training.—As a general rule the pupils' conduct is good. They give as much satisfaction as can be expected. Owing to their good-will and docility, corporal punishments are rarely resorted to.

Our pupils daily assist at divine service held in our chapel; on Sunday they go to the mission church. Religious instruction is given them by the reverend father chaplain.

Health and Sanitation.—With the exception of one little girl who was sent home on account of ill health, the pupils have been quite well all the year. The sanitary conditions, drainage, &c., are good.

Water Supply.—The lake water, which is very good for drinking, as well as for laundry purposes, was plentiful until a year ago. The brothers decided on digging a well thirty-five feet deep, which now supplies us with excellent and abundant water.

Fire Protection.—A force-pump with hose, fire-escapes, ladders, buckets and axes are the fire-appliances on hand just now. Great care is taken to prevent an outbreak of fire.

Heating and Lighting.—Wood is used for heating and coal-oil for light.

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Recreation.—In every season, when the weather permits, long walks are taken daily. Football, baseball and swings are the chief games in summer. Picnics taken on one of the many islands that dot the lake, and berry-picking, afford great pleasure to the children.

I have, &c.,

SISTER M. McDOUGALL,

Principal.

PROVINCE OF ALBERTA,
LESSER SLAVE LAKE C.E. BOARDING SCHOOL,
VIA ATHABASCA LANDING,
LESSER SLAVE LAKE, July 1, 1906.

FRANK PEDLEY, Esq.,

Deputy Supt. General of Indian Affairs,
Ottawa.

SIR,—I beg to submit my annual report of this school situated on the north shore of Lesser Slave lake and not on a reserve.

Land.—The mission land consists of about 90 acres, of which 20 is under crop.

Buildings.—The buildings on the mission are:—

(a) church; (b) mission house; (c) the home, which is a log building, 33 x 23 feet, with kitchen, 17 x 14 feet. This is at the present time having new foundations put under it, and is being entirely remodelled inside. There is also a frame addition, comprising school-room, 34 x 22 feet, and boys' dormitory above. (d) three stores, 18 x 16 feet, 17 x 25 feet; (e) old mission house; (f) stabling, outhouses and implement-shed. There were no additional buildings put up during the year.

Accommodation.—The home could afford accommodation for 19 girls and 16 boys and 4 of a staff.

Attendance.—The attendance has been below the average, which has been due to two causes: first, sickness, culminating in an epidemic of measles, which compelled the closing of the school for five weeks and a half, and second, the plentifulness of fur this winter, which has caused several to go away and take their children with them.

Class-room Work.—Those attending regularly have shown good progress. Some of the elder boys and girls show good ability in arithmetic and drawing. The majority are good writers, and several of the younger ones give great promise.

Water Supply.—The water has to be brought from the river about a quarter of a mile distant.

Fire Protection.—There is no adequate protection against fire.

Heating and Lighting.—The buildings are heated by wood stoves and lighted with oil lamps.

Recreation.—The boys play football and baseball and various games in their seasons, including bows and arrows; the girls skip, swing, and play a variety of indoor games and are fond of dolls.

Moral and Religious Training.—The children receive careful training in the principles of the Church of England.

General Remarks.—The total annual expenditure for the school is \$1,500.

I have, &c.,

T. W. STREETER,

Principal.

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PROVINCE OF ALBERTA,
LESSER SLAVE LAKE R.C. BOARDING SCHOOL,
ST. BERNARD'S MISSION,
LESSER SLAVE LAKE, July 2, 1906.

FRANK PEDLEY, Esq.,
Deputy Supt. General of Indian Affairs,
Ottawa.

SIR,—I have the honour to forward my annual report on the Lesser Slave Lake (St. Bernard's mission) Roman Catholic boarding school for the year ended June 30, 1906.

Location.—The St. Bernard's mission is situated on the northeastern banks of Lesser Slave lake, on a beautiful hill which slopes towards the lake, and commands a view of the surrounding country.

Buildings.—There are three buildings. The main building is 72 feet long by 25 feet wide and three stories high. The boys' house is 60 feet long by 25 feet wide and two stories high. The third building, which has been set apart for a school-house, is 30 feet long by 24 feet wide and three stories high.

Accommodation.—The girls have their apartments in the main building, which is comprised of a large recreation hall, two roomy and well ventilated dormitories, a cheerful sewing-room and a refectory. The remaining apartments are occupied by the members of the staff. The boys have the same accommodation in their house, viz., recreation hall, dining-room and dormitory.

Land.—The area of land connected with the school is about 9 acres, and belongs to the mission.

Attendance.—There are from 40 to 50 pupils in attendance.

Class-room Work.—The programme of studies was carefully carried out by the teachers. The scholars are interested in the school, and seem to understand the advantages of instruction.

Industries Taught.—The girls are taught all that can contribute towards making them competent housekeepers; that is, culinary art, washing, ironing and sewing. The boys are kept busy preparing the fuel, carrying water, weeding the garden and other work about the house.

Moral and Religious Training.—The moral and religious training is based on the pure and unsullied doctrine of the Holy Scriptures. The children are instructed by myself with great care in their religious duties, which we endeavour to make them understand and practise.

Health and Sanitation.—Measles broke out among the pupils in March; but there was no serious case. During the past year the children enjoyed excellent health.

Water Supply.—The water-supply is obtained from wells dug near the house.

Fire Protection.—The only fire-appliances on hand consist of a force-pump, with hose, ladders and buckets.

Heating and Lighting.—The main building is heated by a hot-air furnace; the other houses by stoves. Coal oil is used for lighting purposes.

Recreation.—Outdoor games are allowed as often as the weather permits. Since early in spring the pupils were taken to the neighbouring wood every day, where the boys enjoyed themselves with their bows and arrows, while the girls found amusement in gathering gum and wild flowers.

General Remarks.—The government grants yearly \$72 per capita for 40 pupils.

I have, &c.,

A. DESMARAIS, O.M.I.,

Principal.

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PROVINCE OF ALBERTA,
McDOUGALL ORPHANAGE AND BOARDING SCHOOL,
MORLEY, June 30, 1906.

FRANK PEDLEY, Esq.,
Deputy Supt. General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my first annual report for the year ended June 30, 1906.

Location.—The school is situated on an elevation about 1 mile north of the Bow river, and 4 miles east of the eastern boundary of that part of the Stony reserve on the north side of the same, in the Morleyville settlement, and with full view of the perpetually snow-capped peaks of the Rocky mountains.

Land.—The land on which the school is situated comprises lot No. 8, granted by the government, containing 1,137 acres, and the north half of lot No. 7, purchased by the government about two years ago for water-supply purposes; this contains about 300 acres.

Buildings.—The buildings are as follows: main building, consisting of two wings, built of wood on stone foundations and two stories high. One of these wings was built in 1890, and is 38 x 44 feet; the other, built in 1900, is 26 x 40 feet. The basements of these buildings, which during the year have undergone a thorough renovating, are used by the girls and boys as recreation-rooms. The old wooden floors have given place to up-to-date and substantial concrete ones, the walls have been given a coat of 'Muralo,' giving the whole a comfortable and sanitary appearance. Baths, closets and wash-basins, with hot and cold water, have been put in, so that in this respect we are well provided for. On the ground floor are the kitchen, dining-room, boys' assembly-room, sewing-room, office, sitting and two bed-rooms. On the first floor are the girls' and boys' dormitories, farmer's room and rooms for four lady members of the staff. In addition to the main building, and one hundred and twenty-five yards to the north, is the school-house, a frame building on a stone foundation, 25 x 35 feet, one story high. To the east of the main building, on the bank of the coulee, are the driving-shed and implement-house, and ice-house and cold storage, both of which have been built this year. Immediately to the south of these are the stable and corral, which are inadequate to the demands of the ranch.

Accommodation.—There is accommodation for 40 pupils and a staff of 6, the principal and his family having to make the best they can of the situation.

Attendance.—The attendance during the year has been fair; comparatively little trouble has been experienced with truancy.

Class-room Work.—The class-room work has been of a highly satisfactory nature, the girls and boys taking hold of their work and making good progress. Discipline has been maintained without resort to corporal punishment.

Farm and Garden.—In this connection very little of an encouraging nature can be said. Our climate and soil are against us in this very important work. The land is of a very gravelly nature, making it impossible for more than very small patches to be broken. Our closeness to the mountains makes general gardening and farming among the almost impossible things. Grain does not mature to any great extent, and is sown almost entirely for green-feed purposes. There is under cultivation this year as follows: oats, 30 acres; barley, 4 acres; wheat, spring, 1 acre; potatoes, 1 acre, and turnips and carrots, 1½ acres. If we are not visited by the early frosts, we hope to have good results from our labours.

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Industries Taught.—The girls are instructed in the art of housekeeping. Great care is taken in training them in cooking, washing, sewing, knitting, cutting and making cloth. The boys are taught general ranching, ploughing, and the care of cattle, horses and pigs. We hope that both girls and boys will, when they leave the institution, be able to take good care of their homes and ranches.

Moral and Religious Training.—Great care is taken in teaching the girls and boys the faith in which we trust. Morning and evening worship is held each day of the week. In addition there are the regular Sabbath services: at 11.30 a.m.; preaching service in the church, a distance of 2 miles, Sabbath school at 2.30 and prayer and praise service at 7 p.m. No persons but those who by their daily life set good examples are engaged as members of the staff.

Health and Sanitation.—The health of the children has been good; with two or three exceptions none have suffered from any disease. The sanitary conditions are good; drains connected with baths, closets and laundry take away all refuse to where we hope a septic tank will be built during the coming year.

Water Supply.—There is an abundant supply of the purest of water by means of pipes laid from a reservoir, which is kept well filled by a spring, about five hundred yards from the house, at an elevation of seventy-five feet. Pipes are laid through the whole house supplying hot and cold water wherever needed.

Fire Protection.—There is ample protection against ordinary conflagration. A three-inch pipe runs from the basement to the top floor, and there is a length of hose attached on each floor which can be used at a moment's notice. There is also at the west end of the building a hydrant, to which three lengths of hose can be attached. Besides this there are three Babcock fire-extinguishers and a number of grenades.

Heating and Lighting.—The main building is heated by two wood-burning furnaces, one of which does not give very good satisfaction. The school-house is heated by a box-stove. All the buildings are lighted with coal-oil lamps.

Recreation.—We find that the rules of health demand a great deal of outdoor exercise. This is granted as much as possible. The girls like swinging and walking, of which they do a great deal. The boys are fond of football and other sports.

We are very grateful for the hearty co-operation of the Indian agent, Mr. T. J. Fleetham, who has done all in his power to advance the interests of the school. Dr. Lafferty has also given us the weight of his influence.

All of which is respectfully submitted.

I have, &c.,

C. B. OAKLEY,

Principal.

PROVINCE OF ALBERTA,

OLD SUN'S BOARDING SCHOOL,

GLEICHEN, ALTA., July 3, 1906.

FRANK PEDLEY, Esq.,

Deputy Supt. General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit a report of the St. John's homes (the Old Sun's boarding school and the White Eagle's boarding school) on this reserve, and to acknowledge the substantial government grant-in-aid received by us during the fiscal year just ended.

Location.—The homes are situated, the one at the North Camp and the other at the South Camp, about 10 miles apart and within a few yards of the Bow river in
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each case. That at the North Camp is known as Old Sun's school and the other as White Eagle's. In each case a few acres of land have been inclosed in connection with the school, portions of which are under cultivation. At the South Camp nothing is being done at present pending arrangements for the permanent amalgamation of the two schools. The post office, Gleichen, is under 5 miles from Old Sun's and about 10 miles from the White Eagle's boarding school.

Buildings.—The Old Sun's school comprises the boarding school proper, the school-house, the laundry and the coal and wood shed, with other usual outhouses. The White Eagle's school, with its outbuildings, is a more attractive and better situated building than Old Sun's, and was erected by us at the urgent request of the South Camp Indians in 1894. Both buildings are in poor condition.

Accommodation.—Old Sun's school has dormitory floor space for 40 pupils, and the White Eagle's school would accommodate about the same number.

Attendance.—The number of pupils attending the school on the 30th ult. was 33: 14 boys and 19 girls.

Class-room Work.—The department's regulations have been carefully followed, and we are glad to be able to report a fair degree of progress, more particularly in enunciation and general application. The general behaviour has been excellent. We would again emphasize the need of a reader for the older children more adapted to the needs of their future lives than the general Canadian reader now in use.

Industrial Work.—About two acres of land have been worked by the boys under regular superintendence, and a supply of vegetables more than large enough for the needs of the institution has been raised by them. In addition they have cultivated an attractive little flower garden. They are given regular instruction in milking and the care of both cattle and horses. They are also taught to do plain repairs and generally to help themselves. The girls have been taught as usual the regular household duties, in which some of them are very apt. The older ones are also taught to mother the little ones in various ways.

Moral and Religious Training.—Particular stress is laid upon this part of our work, and regular instruction is given both in English and their native tongue, with a view to quickening and instructing the conscience. The attention and excellent behaviour of the children encourage us to believe that the instruction has not been fruitless.

Health and Sanitation.—Everything has been done to keep up the health of the children and staff—not an easy matter in view of the unsanitary surroundings.

Water Supply.—We have drawn a fairly large supply from three wells, but the water is not altogether wholesome.

Fire Protection.—Two Star extinguishers and a Babcock engine are kept ready for use in the dining-hall, and a fair number of hand-grenades are distributed throughout the building. Pails of water and axes also are placed ready for use, and fire-escape ladders are in position from each of the dormitories.

Heating and Lighting.—The buildings are heated by stoves only, and lighted by coal-oil lamps.

Recreation.—Every attention is given to recreation, and the children are encouraged to be as much as possible in the open air. They are taught to amuse themselves with a variety of games, and we endeavour to oversee and guide all their recreation.

I have, &c.,

H. W. GIBBON STOCKEN,

Principal.

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PROVINCE OF ALBERTA,
PEIGAN C.E. BOARDING SCHOOL,
PEIGAN RESERVE, PINCHER CREEK, ALTA., July 1, 1906.

FRANK PEDLEY, Esq.,
Deputy Supt. General of Indian Affairs,
Ottawa.

SIR,—I beg to submit my report on the above institution for the year ended June 30, 1906.

Location.—This school is situated on the banks of Pincher creek, on the north-east quarter of section 12, township 7, range 29, west of the 4th meridian.

Land.—The school owns 40 acres of land, being legal subdivision 9 of the section above mentioned.

Buildings.—The buildings consist of a boarding school proper, a laundry, stable, and other necessary buildings.

The boarding school proper is 78 x 32 feet over all. It is built of wood, and is lathed and plastered throughout. It contains kitchen, dining and play and bedrooms for the children; also rooms for the staff, as well as small store-rooms and lavatories.

Accommodation.—This school has accommodation for 40 pupils, viz., 24 boys and 16 girls; also for a staff of 6 persons.

Attendance.—The attendance has been better than for a number of years.

Class-room Work.—Good progress has been made in every branch.

Farm and Garden.—The garden was a great success. Enough vegetables were grown to supply the school, such as potatoes, carrots, beets, onions, cabbage and turnips.

Industries Taught.—The boys are taught farming, including care of horses, cattle and poultry, and all their own work on their side of the school. The girls are taught dressmaking, sewing, mending, darning, knitting and cooking, also general housework.

Religious Instruction.—Religious instruction is given daily, both morning and evening, and everything possible is done both by precept and example to teach the pupils to lead a better life.

Health and Sanitation.—The health of the pupils has been good, with the exception of scrofula, and only very little of that.

Water Supply.—We have a good supply of water from a drive well in the kitchen.

Fire Protection.—There are three small fire-extinguishers, which are all we have in case of fire.

Heating.—The building is heated by two large Pease furnaces, which give thorough satisfaction.

Recreation.—The pupils have ample grounds to play in, and delight in such games as football, fishing, and all outdoor games.

I have, &c.

(REV.) W. R. HAYNES,

Principal.

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PROVINCE OF ALBERTA,
PEIGAN (SACRED HEART) R.C. BOARDING SCHOOL,
PEIGAN RESERVE, MACLEOD, ALTA., July 5, 1906.

FRANK PEDLEY, Esq.,
Deputy Supt. General of Indian Affairs,
Ottawa.

SIR,—I beg to submit the following report of the Peigan (Sacred Heart) boarding school on the Peigan reserve for the fiscal year ended June 30, 1906.

Location.—The Sacred Heart boarding school is situated on elevated ground on the north side of the Old Man river—a very healthy location—in the centre of the Peigan reserve, in close proximity to the agency buildings.

Land.—The land on which the school is built belongs to the reserve. About half an acre is fenced for a vegetable garden in which during favourable seasons a fair crop is raised.

Buildings.—The school building is a large house, 84 x 26 feet, with an addition on the north side for a kitchen, 19 x 16 feet, and a pantry, 17 x 14 feet. The centre building is 30 feet square, two stories high. The garrets are unfinished, and therefore unoccupied. On the ground floors are the refectories for the boarders and staff, the parlour and a corridor leading from the front door to the kitchen. On the first floor are the rooms for the staff and a chapel of good size. On the east side on the ground floor are the sewing-room and recreation-room for the girls; on the first floor the dormitory for the girls. On the west side are the school-room and boys' recreation-room, and the boys' dormitory on the floor above these two lower rooms. Close to the kitchen is the laundry, 30 x 20 feet, with a washing-room, 20 x 20 feet, and a coal-room, 20 x 10 feet, on the ground floor, and a drying-room in the upper story.

Accommodation.—The building affords accommodation for 40 boarders and the staff.

Attendance.—The pupils of this institution are all boarders, and therefore the attendance is regular. During the fiscal year last past 3 girls died of consumption, complicated with scrofula. There were 7 new pupils during the year, 3 boys and 4 girls.

Class-room Work.—The programme laid down by the department is followed, and the progress is generally speaking fair and encouraging.

Farm and Garden.—We have not a regular farm, but we have a garden in which at special hours the pupils work.

Industries Taught.—Our children have special hours every day for manual work. The boys work in the garden, keep their rooms and dormitory clean, scrub the floors, help in the laundry, and work around the house. The girls are taught general house-keeping, sewing, mending and washing, whilst the older girls cut out and make their own dresses.

Moral and Religious Training.—Special attention is given to the teaching of moral and religious truths. Prayers, catechism and Bible history are taught for half an hour each day.

Health and Sanitation.—The health of the pupils has been good, except for the three pupils before mentioned. In the cases of scrofula there is a slight decrease. Health is generally improving.

Water Supply.—The institution has a good well a few feet from the kitchen, with a sufficient supply of water for the establishment.

Fire Protection.—We have a fire-extinguisher; fire axes and buckets of water are kept at convenient places.

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Heating and Lighting.—We use common coal stoves for heating purposes. Coal-oil lamps are used for lighting. Proper care is taken against any danger of fire. Matches are kept out of the reach of the pupils.

Recreation.—We have two recreation-rooms, large and well ventilated, one for the boys and one for the girls. There is a fence around the school building inclosing two yards, one for the boys and the other for the girls. Besides this the children play in good weather on the prairie near the school under the supervision of some of the staff; the boys taking pleasure in football and other good games.

I have, &c.,

L. DOUCET, O.M.I.,

Principal.

PROVINCE OF ALBERTA,

SARCEE BOARDING SCHOOL,

CALGARY, July 2, 1906.

FRANK PEDLEY, Esq.,

Deputy Supt. General of Indian Affairs,
Ottawa.

SIR.—I have the honour to submit a report of the Sarece boarding school for the year ended June 30, 1906.

Location.—The school is situated on the southeast corner of the reserve, and near the agency buildings.

Land.—About 10 acres are fenced in for school and mission purposes.

Buildings.—The school consists of boys' and girls' wings, separated by the dining-room and kitchen.

Accommodation.—There is accommodation for 20 boys and 10 girls, and for a staff of 3.

Attendance.—Fifteen pupils were on the roll on June 30, comprising 7 girls and 8 boys.

Class-room Work.—This has gone on as usual, and progress has been good. The grading of the pupils is as follows:—

	Boys.	Girls.	Total.
Standard V.	2	2	2
" IV.	2	2	4
" III.	2	..	2
" I.	4	3	7

Moral and Religious Training.—This has the first place in all our work, and is always kept in view.

Health and Sanitation.—The health of the pupils has been good during the year. Water Supply. Two pumps provide us with excellent water.

Fire Protection.—Barrels of water, buckets and fire-axes are on hand, and kept in convenient places.

Heating and Lighting.—Coal and wood stoves provide for the former, and coal oil lamps for the latter.

Recreation.—Swimming and football are resorted to by the boys, and croquet and walks with the matron are indulged in by the girls. The elder pupils enjoy the reading of wholesome literature.

General Remarks.—The staff, 3 in number, work together in perfect harmony for the welfare of the children.

I have, &c.,

PERCY E. STOCKEN,

Acting Principal.

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PROVINCE OF ALBERTA,
SMOKY RIVER (ST. AUGUSTINE) R.C. BOARDING SCHOOL,
SMOKY RIVER, VIA EDMONTON, ALTA., June 30, 1906.

FRANK PEDLEY, Esq.,
Deputy Supt. General of Indian Affairs,
Ottawa.

SIR.—I have the honour to submit my annual report for the year ended June 30, 1906.

Location.—The position of the boarding school is pleasant. St. Augustine valley is sheltered from winds; we never hear of snow-drifts here, as in some other parts of Canada.

Land.—The land connected with the school was cleared many years ago. There are about 350 acres under cultivation.

Buildings.—These are as follows: a class-room, 35 x 20 feet, the second story of this building is used as a boys' dormitory; the main building, three stories high, 40 x 26 feet, the ground floor of which is the sisters' residence, the second story contains sewing-room, parlour and sick-room, while the upper part is the girls' dormitory. Every apartment is well lighted and ventilated.

Accommodation.—There is ample accommodation for 8 sisters and 60 children.

Attendance.—The class-room attendance is regular, except for a few weeks during which the children were sick.

Class-room Work.—Special attention is given to the use of English. The subjects taught are: reading, writing, arithmetic, grammar, dictation, composition, geography, history, vocal and instrumental music, Bible history and catechism.

Moral and Religious Training.—Half an hour is devoted daily to the pupils' religious instruction. Prayers are said in common every morning and evening. The larger pupils appreciate the value of a good Christian training, and they make it the subject of their conversation very often.

Farm and Garden.—The grounds are well kept, various vegetables and flowers are grown in the garden, the older scholars help the lay brothers with the farm work.

Health and Sanitation.—The general health of all has been very good for the greater part of the year, but in the month of May there was a serious outbreak of measles, followed by three cases of pneumonia; two recovered.

Industries Taught.—General housework is taught to the girls, while the boys are employed in farm work.

Water Supply.—All the water used in the house is drawn from the river.

Fire Protection.—A large brook flowing into the Peace river, and two ladders are our chief protection against fire.

Heating.—A hot-air furnace gives a good heat in the main building; the school-room is heated by a stove.

Recreation.—The pupils indulge in usual outdoor games.

I have, &c.,

SISTER MATTHIAS,

Principal.

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PROVINCE OF ALBERTA,

ST. ALBERT BOARDING SCHOOL,

ST. ALBERT, July 2, 1906.

FRANK PEDLEY, Esq.,

Deputy Supt. General of Indian Affairs,
Ottawa.

SIR,—I beg to forward my annual report on the St. Albert boarding school for the fiscal year ended June 30, 1906.

Location.—The school is not on a reserve, but is very picturesquely situated on an elevation looking down upon the Sturgeon river valley into the town of St. Albert.

Land.—About 335 acres of land, owned by the Sisters of Charity, are in connection with the school. It lies in township 54, range 25. Of this, about 200 acres yield a good annual crop of grain and vegetables, while the rest is in pasture or woodland.

Buildings.—The school itself is a four-story structure in two sections. The main building, which is 150 x 35 feet, comprises four well equipped and comfortable classrooms, besides the apartments occupied by the staff and the girls. The other section, 50 x 30 feet, is for the boys' quarters. Besides the main structure are a number of outbuildings consisting of bakery, meat-house, ice-house, laundry, granary, root-house, hen-house, barns and stables, implement-sheds and repair-shops.

Accommodation.—The school affords accommodation for 200 persons.

Attendance.—This year there has been an average attendance of 68.

Class-room Work.—In the class-rooms the public school curriculum for the Territories is followed. The work of the children has been very satisfactory in all studies taken up. Reading and mathematics especially obtained very good results.

Farm and Garden.—Since most of the boys turn to agriculture, much attention is paid to this kind of work. Most of the farm work is done by the larger boys, under the supervision of four hired men. This year we have obtained a crop of 1,062 bushels of barley, 1,908 bushels of oats, 1,614 bushels of potatoes, 1,800 bushels of wheat, and 300 tons of hay have been put up.

Industries.—Both boys and girls have fixed hours' work each day, during which they are trained in various kinds of industries. The boys receive careful training in farming and gardening and the care of stock. Besides they keep in good repair all farm implements, fences, harness, and the pupils' shoes. The live stock comprises 20 horses, 125 pigs, 175 head of cattle, and about 250 poultry.

The girls are carefully trained in all household duties, such as cooking, cutting and sewing, mending and laundry work. They also card, spin, weave and knit, and make fancy-work; in short, they learn all that may be of use to them upon leaving school.

Moral and Religious Training.—Nothing is spared on the part of the teachers to give to the pupils a sound moral and religious training, and to instil into their minds a true sense of their Christian duties.

Health and Sanitation.—The health of the children is in very good condition. We were fortunate enough to keep from our doors any kind of epidemic. Precautions are taken to ensure good sanitary conditions. Good ventilation is provided, especially in dormitories and class-rooms.

Water Supply.—The water-supply is very satisfactory. Besides two good wells on the grounds, from which cattle are watered, a large hot-air engine also pumps water to a 1,500 gallon tank in the attic, whence it is distributed throughout the house. Thus bath-rooms on every flat are provided with hot and cold water. This year we made the acquisition of another hot-air engine of greater force than the former; the old one will be soon placed over the well where the stock is watered, and the new one will be for the building's supply.

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Fire Protection.—Water being well distributed throughout the house, this affords a good defence against fire. Numerous outside staircases lead from every flat, besides three ladders placed about the building. Two reels of hose, five fire-extinguishers, eight grenades and three axes are also at hand.

Heating and Lighting.—The heating apparatus consists of two hot-air furnaces, besides several stoves. Coal-oil lamps supply the light.

Recreation.—The children indulge in much outdoor exercise, especially after meals. Several swings are at their disposal upon the playgrounds, and two open play-houses built last year afford much comfort. Pienics and berrying excursions are often granted during the summer months.

Hoping this report will be satisfactory,

I have, &c.,

SISTER L. A. DANDURAND,

Principal.

PROVINCE OF ALBERTA,

WABISKAW LAKE (ST. JOHN'S MISSION) BOARDING SCHOOL.

WABISKAW LAKE, VIA ATHABASCA LANDING, September 11, 1906.

FRANK PEDLEY, Esq.,

Deputy Supt. General of Indian Affairs,

Ottawa.

SIR,—I have the honour to forward the annual report of the Wabiskaw Lake (St. John's Mission) Church of England boarding school for the year ended June 30, 1906.

Location.—The school is situated on Lake Wabiskaw, on the second lake coming in from Athabasca Landing. Our nearest post office is 120 miles south of here. The school and settlement are situated on the north side of a little bay.

Land.—The land has never been surveyed or measured; it is a long, narrow strip running back about three-quarters of a mile. It is situated between the trading posts of the Hudson's Bay Company and Johnston Bros. There is perhaps in the claim about 45 acres, about 12 acres of which is cleared. The land belongs to the Church Missionary Society of England, and was bought from an Indian who had cleared about an acre. The land is rich, and slopes gently towards the south. Potatoes and grains of various kinds have been grown with success. We rarely have late or early frosts.

Buildings.—The boarding school building is 33 x 24 feet, with kitchen 22 x 16 feet. This building is a story and a half high; with Gothic windows.

We have also a new mission house, two stories high, the main part is 20 feet square; the kitchen, 14 x 13 feet.

The church is 17 x 22 feet, with a chancel, 10 x 12 feet, in which school is taught during the week.

A little office, or study, 12 x 14 feet, was moved and is now used as a storehouse.

The cattle-shed, horse-stable, pig-house, dog-house and poultry-yard are all log buildings.

Accommodation.—In the school building we have room for about 15 girls and 10 or 12 boys, also for 2 ladies of the staff.

The mission house has accommodation for the missionary's family, also a lady teacher.

Attendance.—The majority of the scholars being boarders, their attendance is good. Also the children of the traders near the school attend very regularly. The

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average has not been so high as some years. There are one or two families of Indians living within easy reach of the school, but they attend very irregularly.

Class-room Work.—The teaching ranges from the very beginning to about the fourth reader. The writing generally is very good; to the more advanced pupils geography and grammar are taught. They are nearly all children of Cree-speaking people, but they have learned English very fast.

Farming and Gardening.—There is in this neighbourhood no real farming; cattle and horses are raised, and the missions, traders and a few Indians have good gardens.

Our garden has been very successful and a source of great profit to us, also it is an object lesson to the Indians in what the land can produce.

Industries Taught.—There are no distinct industries taught, but the boys are taught to drive horses, feed stock, milk, &c., and the girls are instructed in house-work, &c.

Moral and Religious Training.—During last year we have been reading with the children *The Acts*. They are read generally in English and Cree. We also have prayers and singing each night for the boarders, our object and desire being to bring each child to a knowledge of Jesus as their personal Saviour.

Health and Sanitation.—The health of the Indians generally is not very good, as many of the people are consumptive. During last winter we had an attack of whooping-cough in the school and neighbourhood, which carried off about 20 children of different ages.

Water Supply.—The water-supply is defective, and we are dependent on the lake. At times, especially during high winds, the mud becomes stirred up and is mixed with the water, and we have to strain it. It is drawn in barrels to the school.

Fire Protection.—We have no regular system. Ladders are hung on to the peak of both houses. We have in the new house, large zinc chimneys and a supply of water always standing in barrels.

Lighting.—The lighting is done by means of lamps and candles.

Recreation.—We have swings, teeters, merry-go-rounds, also sleighs and skates.

The ladies took all the children that remained with us out camping to a beautiful sandy beach where the lake is not too deep, so that the children could wade, bathe and paddle around in the canoe nearly all day.

General Remarks.—I regret that I cannot send out a financial report, as this year I arranged with Bishop Reeve to receive and pay out all moneys for the school.

I have, &c.,

CHARLES R. WEAVER,

Principal.

PROVINCE OF ALBERTA,
WABISKAW (ST. MARTIN'S) R.C. BOARDING SCHOOL,
LAKE WABISKAW, July 1, 1906.

FRANK PEDLEY, Esq.,

Deputy Supt. General of Indian Affairs,
Ottawa.

SIR,—I have the honour to forward my annual report of the school for the fiscal year ended June 30, 1906.

Location.—St. Martin's mission is located on the southern shore of Wabiskaw lake. The main buildings are erected on an elevated stony point, and afford a very pleasing view of the surrounding scenery in summer season.

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Land.—The area of land belonging to the mission comprises about 10 acres. A large portion is under cultivation; the remainder is still uncleared, and serves for pasturage. The soil is quite fertile in places. Last year the garden yielded a large crop of vegetables.

Buildings.—There are four buildings. The two largest stand in a horizontal line, and the church is just between them, but advanced toward the lake so as to form an oblique line to the two houses. The building on the east side is three stories high, the largest room on the first floor being consigned to the school use. Two other rooms are used, one as a dining-room and the other as a sewing-room. The addition on the north side is two stories high—the lower is the kitchen and the upper the boys' dormitory.

On the second floor of the main building are the sisters' apartments and the chapel. The third story is entirely occupied by the girls as a dormitory. A store-house has been constructed a few paces from the kitchen, and in it are kept all the provisions and groceries.

No new buildings have been constructed during the past year.

Attendance.—The attendance is always very regular.

Class-room Work.—All the pupils have made gratifying progress during the past term. The good results of the last examination were a great satisfaction for teachers and parents.

Industries.—The boys are employed in preparing fuel, carrying water, taking care of the domestic animals, and they are taught gardening in the proper seasons.

The girls receive good training in all that pertains to housekeeping. They are very useful in these industries.

Moral Training.—The reverend fathers and sisters devote a large portion of their time to this essential part of education. Their zealous labours are not without happy results.

Health and Sanitation.—The health of the children has been exceptionally good this year. Every possible means are taken to keep them in good health.

Fire Protection.—The water of the lake and the supply continually kept in the house are our protection against fire. Other improvements will soon be made in this line.

Heating.—The houses are heated by stoves. Wood is the only fuel used.

Recreation.—Regular hours are set apart for recreation each day. The children amuse themselves at various games. Exercise in the open air is greatly encouraged.

I have, &c.,

J. M. DUPE.

Principal.

PROVINCE OF ALBERTA,

CALGARY INDUSTRIAL SCHOOL,

CALGARY, June 30, 1906.

FRANK PEDLEY, Esq.,

Deputy Supt. General of Indian Affairs,
Ottawa.

SIR.—I beg to submit the following as my tenth annual report on the above institution.

Location.—The school is situated on a parcel of land, nearly half a section, partly purchased and partly the gift of the city of Calgary, about 4 miles south of the city, close to the Bow river.

Land.—This comprises all that portion of the following quarter-sections lying to the south of the river: N.E. $\frac{1}{4}$ sec. 35, township 23, range 1, and S.E. $\frac{1}{4}$ sec. 2, township

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24, range 1, west of the 5th meridian. The area is about 275 acres, of which about one-fourth is fit for cultivation, the remainder being gravel and swamp, only good for pasture.

Buildings.—No new buildings have been erected this year. General repairs have been done on them all, as well as some of the roofs painted. The building still occupied by the principal has had one room sheathed with matched lumber inside, as it was uninhabitable during the winter months. The log shed mentioned in last year's report as in building for protection for the implements, has been completed.

Accommodation.—There is accommodation for 35 or 40 boys in the main building, and for a staff of 4.

Attendance.—This still is the greatest trouble we have. Our numbers are still deplorably small, and each year the difficulty of securing pupils seems to increase, in particular the transfer of the older pupils of the boarding schools.

We commenced the year with 27 on our books. Thirteen were discharged during the year, and 5 admitted, leaving us now with a total of 19.

Class-room Work.—This is regularly carried on during the winter, that is, whenever the temperature of the school-room will allow. Owing to the defects repeatedly reported in our heating system it is occasionally found that the school-room is so cold as absolutely to forbid its use. In the summer, with our small numbers, we find it difficult to leave our distinctly industrial work for books, so that then the school work is intermittent.

Farm and Garden.—Our crops turned out well last season. Owing to our land being a light sand, chiefly derived originally from the river silt, we can not expect to secure the heavy crops which better soil might give us, but certain vegetables and roots which are particularly adapted for such soils always give us good returns. Our grain is always light and useful only for feeding purposes, but we have every year managed to secure enough vegetables, potatoes, carrots, parsnips, turnips and such like to last the whole school throughout the winter and until the new ones come in again. Onions nearly always prove a comparative failure when grown from seed, and only fair when grown from sets.

Last season and again this spring we were visited by cutworms which attacked young plants severely, and in some cases cleared them out altogether. This spring, after our successful trial of it last year, we at once resorted to the established remedy—Paris green applied with moistened bran—and with the best results.

At the present time our crops are looking extremely well. Barley is promising an excellent crop, and the oats and wheat (spring) are also showing up well. We sowed a small patch of fall wheat last August. Owing to the dry weather supervening some did not germinate, and the places where it germinated well suffered from the want of snow as a covering, and the high winds this spring completed its destruction by blowing away the earth and leaving the roots entirely exposed. We ploughed it in and sowed barley this spring.

Industries Taught.—Carpentry.—For a carpenter we have an excellent mechanic who is doing well, and while we have no particularly striking work done, the whole of the repairs to the buildings are done under his supervision. All the boys take their turn at work here as well as on the farm, so as to make them acquainted with the ordinary tools and their uses.

Printing.—The work here has been done by a few boys, some of whom are expert at it. The whole plant is provided by the church, for which we do work free of charge, the material being supplied from the same source.

Moral and Religious Training.—This is of course one of our chief aims. We have our ordinary morning and evening prayers every day, with full services on Sundays.

Health and Sanitation.—The health throughout the institution has been good during the year, only two cases of chronic form of indisposition being here. The sanitation is good.

Water Supply.—Our well still continues to give good satisfaction. It might, with advantage, be a little deeper, but so far we have found ample supply for our needs.

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Fire Protection.—A standpipe connected with our large tank in the attic, with hose on each floor; an indoor chemical system with a duplicate set of hose, fire-axes, fire-pails, hand chemicals, all in convenient positions, afford what appears to be ample protection.

Heating.—Here we come to the blot on the whole place. Neither furnace is giving satisfaction; both are now in pieces undergoing repairs. It seems to me that the only resource will be a boiler and a new system of heating by steam at low pressure.

Lighting.—Coal-oil lamps are used throughout the building, and of course they always are a source of some danger. Great care is taken, but they constitute a great anxiety whenever in use in a place like this. The city of Calgary has its electric light system now extended to within $2\frac{1}{2}$ miles of the school.

Forestry.—Some of the trees which we have planted, and they are a very large number, are doing well, whilst others have had a severe setback this spring. The fall was dry towards the end; the winter fall of snow was very light, little rain fell during the early spring, and these conditions, coupled with very warm weather early in the year followed by very severe frost, wrought considerable damage. Russian poplar and white ash came through very well and are making good growth; but Manitoba maple and Dakota cottonwood suffered a great deal.

I have, &c.,

GEO. H. HOGBIN,

Principal.

PROVINCE OF ALBERTA,

RED DEER INDUSTRIAL SCHOOL,

RED DEER, ALTA., July 15, 1906.

FRANK PEDLEY, Esq.,

Deputy Supt. General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my annual report for the year ended June 30, 1906.

Location.—The school is situated on the north bank of the Red Deer river, about 3 miles west of the town of Red Deer, Alberta. It is not located on a reserve, the nearest being about 40 miles north of us. The natural features of the country immediately surrounding the school are very pleasing. The broad and rushing river, about one hundred feet below, forms our southern boundary, while our eastern and western border lines are two deep-banked creeks, affording scenery as fine as any in this part of Alberta. Although we are only 3 miles from Red Deer in a direct line, the windings of the river make the distance to be travelled in reaching the school considerably greater; but the road is being gradually improved.

Land.—The land is of the very best quality, and admirably adapted for mixed farming. It consists of three-quarters of section 14, township 38, range 28, west of the 4th meridian. Also some 14 acres of section 11, which lies between the original school property and a deep gully to the southwest, has recently been added by gift of the government. In addition we have half each of sections 16 and 20 for hay-land. The whole acreage thus under control of the school amounts to 1,140 acres. Section 11 immediately south of the school, of which for several years we have had the use for grazing purposes, has recently been disposed of in the sale of school lands, though we still have the use of one-half of it.

Buildings.—The main building is of gray stone, quarried from the river bank immediately below. It contains the dormitories for the girls, as well as all boys under

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twelve years of age, private rooms for female members of the staff, and the offices, staff-dining and sitting-rooms, general dining-room, kitchen, laundry, store-rooms, sewing-room, junior school-room, &c. A three-story brick building accommodates the larger boys. The upper story of the latter is the general school-room, and is also used for a chapel.

In addition to these larger buildings, there is a neat and commodious residence for the principal, three cottages occupied by married members of the staff, a blacksmith and carpenter shop, ice-house and refrigerator combined, pig-pen, horse-stable, cow-stable, hen-house, dairy, engine-house, implement-house, well-house, pumping-house and three closets.

During the past year a new poultry-house, 50 x 18 feet, has been built; also a new granary, 50 x 32 feet; a new implement-house, 50 x 16 feet, and a new stable for the driving outfit.

Accommodation.—We have accommodation for 90 pupils and a staff of 10.

Attendance.—The year began with 80 names on the roll. The number now enrolled is:—

Total on register, July 1, 1905.	80
Admitted during the year.	11
	—
	91
	—
Discharged.	12
Died.	1
	—
	13
	—
Total on register, July 1, 1906.	78

Class-room Work.—Very satisfactory progress has been made during the year. The following were the numbers in the several grades during the closing quarter:—

	Pupils.
Standard I.	45
“ II.	11
“ III.	11
“ IV.	11
“ V.	6
“ VI.	1
	—
	85

Farm and Garden.—Seventy-five acres more have been cleared, broken and brought under cultivation this year, making now one of the finest farms in central Alberta. The cultivated area has been increased during the past three years from 75 to over 300 acres. Last fall we threshed over 6,000 bushels of grain. This year the cutworm has done us much harm, making it necessary to re-seed much land last spring; but we shall probably thresh a larger crop than ever before. We have now in crop about 150 acres of oats, 80 of barley, 50 of wheat, 10 of potatoes, 6 of flax and 15 of pasture, besides what is occupied by the buildings. We have 10 horses, 80 head of cattle, 50 hogs, 12 sheep and about 150 poultry.

Industries Taught.—The senior boys are made familiar with every department of farm work. Several boys have been taught carpentering, and have attained considerable proficiency. Other trades have been attempted, but the results have not been entirely satisfactory.

The girls are all taught housework, dairying and sewing, and some attention has been given to music and fancy-work.

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Moral and Religious Training.—All the regular church services are held, as well as morning and evening prayers.

Health and Sanitation.—The health of the school has been good, though one boy, who had been at home for more than a year, has died. Also we have had a couple of boys in hospital for some time with lung trouble.

Fire Protection.—The school has 5 Babcocks, 7 Star fire-extinguishers, 10 fire-pails and 10 axes.

Heating and Lighting.—Two Smead-Dowd and two Pease furnaces are used with satisfactory results. Coal oil is used for lighting. The cottages are heated with stoves.

Recreation.—The girls take outdoor exercise by swinging, skipping, walking, and sometimes at football. The most popular amusements with the boys are football, baseball, quoits and hunting. They also delight in fishing, the river providing the best of sport. In winter, skating is exceedingly popular with boys and girls.

I have, &c.,

J. P. RICE,

Principal.

PROVINCE OF ALBERTA.

ST. JOSEPH'S INDUSTRIAL SCHOOL,

DAVISBURG P.O., July 2, 1906.

FRANK PEDLEY, Esq.,

Deputy Supt. General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my annual report for the year ended June 30, 1906.

Location.—The school, which is not on a reserve, is situated in a valley, near the mouth of High river, 4 miles from Davisburg post office, and 25 miles southeast of Calgary. DeWinton, the nearest station on the Calgary and Macleod branch of the Canadian Pacific railway, is about 11 miles west.

Land.—There are 1,550 acres attached to the school. The home farm, consisting of the land in the immediate vicinity of the buildings, contains 1,070 acres, as follows: half of section 22, township 21, range 28; half of the southwest quarter of section 26, township 21, range 28; thirty acres of section 15, township 21, range 28, west of the 4th meridian. The east half of section 26, township 20, range 27, and the northeast quarter of section 36, township 20, range 27, west of the 4th meridian, is held for the school for a hay reserve, and is situated about 12 miles southeast.

All of the above land belongs to the government. A part of the property, known as the home farm, consists of good bottom and bench lands, which, excluding hills and ravines, is fairly well adapted for farming and gardening. The land in township 20 is in a low-lying district, where there is a plentiful supply of prairie hay and good pasturage.

Buildings.—There are two large separate buildings, one for the girls and the other for the boys. These buildings contain the dormitories, lavatories, class-rooms, offices, a kitchen, a common dining-hall and a chapel, and also the rooms for the members of the staff. All of these rooms, especially those in the boys' building, are large, well lighted and well ventilated. Besides the two main buildings, there are a number of other buildings. The first house, in line with the entrance, is the bakery and flour-store; then follow the blacksmith-shop and iron-shed, the carpenter's and shoemaker's shop; a lumber and coal shed, and the men's quarters, a brick-veneered cottage. In

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the next line are the two main buildings, a hospital and the engine-house. The hospital and engine-house are two detached buildings, to the east of the girls' house. Three hundred feet north of the main buildings are the stables, granary, piggery, implement and carriage-shed and slaughter-house.

During the year a bakery, 30 x 40 feet, was built. A well, dug in this building, was furnished with a new pump, which affords a large supply of good water. An ice-house, 30 x 18 feet, was erected. It was built according to a plan of Mr. Haurahan, of Ottawa. There are two apartments in this house, one for meat, and the other for milk, butter, &c. In the meat storage there is room for two carcasses of beef and a couple of dressed hogs. One hundred and ten tons of ice are stored in this building. The meat keeps well during the very warmest weather, and I believe this plan of ice-house is a very satisfactory one. The old buggy-shed was replaced by a larger building, which is 46 x 20 feet. The fire-escape in connection with the girls' dormitory was rebuilt and the bath-room in the girls' building was renovated.

Accommodation.—There is accommodation for 125 pupils and a staff of 12.

Attendance.—The attendance for the year averaged 79. Admissions, 3; discharges, 7.

Class-room Work.—The hours for class are from 9 a.m. to 12 noon and from 1.30 p.m. to 4 p.m., with the usual intermissions. Wednesday afternoon is a half-holiday. The programme of studies prescribed by the department is followed. Junior pupils attend class forenoon and afternoon. The seniors devote half the day to farm work or trade instruction, and half to class-room work. Examinations are held regularly, and pupils are promoted according to results. The pupils are graded as follows:—

Standard I.	9
" II.	21
" III.	21
" IV.	13
" V.	8
" VI.	6

Farm and Garden.—Last year's harvest, a bountiful one, yielded 2,435 bushels of oats, 973 of barley, 380 of wheat, 7,000 of turnips, 650 of potatoes, besides a large crop of garden produce. Five hundred and eighty-six tons of prairie hay were put up.

We have 138 acres under cultivation this year. There are 63 acres of oats, 34 of barley, 14 of wheat, 20 of turnips, 5 of potatoes and 2 acres of mangolds. The season has been a favourable one, and the prospects for a good harvest are promising. Thirty acres were broken this spring and about 60 acres lie in fallow.

Stock.—The farm stock includes 38 horses, 3 bulls, 54 cows, 46 heifers, 21 steers, 35 calves, 17 pigs, and about 200 poultry. Our herd supplies us with almost all the beef we need. We sold a car-load of fat steers to P. Burns & Co., at an average price of \$60.64.

A thoroughbred Shorthorn bull and a Clyde stallion were purchased. The total receipts from farm produce and live stock sold during the year amounted to \$2,274.68. We showed a number of stall-fed cattle at Calgary fat-stock show, and secured second prize for a car-load of fat steers, second in the class of three-year old steers and third in the two-year old class.

Industries Taught.—Carpentry.—Five apprentices learn this trade, which is the only industry taught outside of farming. During the year the work done by the boys included the erection of an ice-house, a buggy-shed and a bakery, besides numerous repairs to buildings and furniture. The boys who work at this trade are employed on the farm a couple of hours daily, and are allowed to hire out for haying and harvesting.

Needle-work.—The girls learn to sew and knit, to repair clothes and to darn. They are also taught the use of the sewing-machine, and to make new clothes. They make all their own clothing, as well as suits, shirts, and socks for the boys. In house-

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hold work they receive daily instruction, and learn how to cook, bake and do laundry and dairy work.

Baking.—A tradesman bakes for the institution. He also does the butchering.

Shoe-making.—Two pupils are in charge of this department. They repair shoes and harness.

Moral and Religious Training.—The pupils are instructed in the doctrines of the Roman Catholic Church. During the summer they assist at mass every morning, and at stated periods there are other religious exercises. On Sunday there is divine service twice.

Prayers are said morning and evening. Catechism is taught, and the children are given every opportunity of benefiting by the teachings of Christianity.

I am pleased to say that the conduct of the pupils has been very satisfactory. Discipline was efficiently maintained without employing severe measures.

Health and Sanitation.—The health of the pupils has been exceptionally good. We have had no deaths, and few cases of serious illness.

The sanitary condition of the school is good. The buildings are well lighted and ventilated, and the drainage is excellent.

Water Supply.—A well, near the river, affords us a supply of good water, which is pumped into the tanks in the different buildings by means of a steam engine.

Fire Protection.—Three tanks, holding about 1,400 gallons each, are kept supplied with water, which is available in case of emergency on any flat. One hundred feet of hose on each story are connected with these tanks. Eighteen fire-extinguishers, eight fire-axes, fifty-five hand-grenades and forty-seven fire-pails are in convenient places on the different floors. The dormitories, which occupy the upper stories of the two main buildings, are each furnished with a large fire-escape.

Heating and Lighting.—The girls' school is heated by coal-stoves. The boys' building is heated by steam. This system is very satisfactory. Thanks to the steam-heating apparatus, our expenses for coal are only about half what they were formerly.

A Siche acetylene gas plant provides the establishment with an abundant supply of excellent light.

Recreation.—Three hours each day are set aside for recreation, and besides a regular weekly half-holiday is devoted to play. Healthful outdoor games are encouraged. The boys play baseball and football. Hockey is their winter sport. The girls are fond of croquet, swinging, skipping and other exercises.

I have, &c.,

A. NAESSENS,

Principal.

ALBERTA INSPECTORATE.

GLEICHEN, June 30, 1906.

FRANK PEDLEY, Esq.,

Deputy Supt. General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my annual report on the inspection of Indian schools for the fiscal year 1905-6.

ST. ALBERT BOARDING SCHOOL.

This school was inspected on September 23 last.

The staff consisted of Rev. Sister Dandurand, principal, and fourteen more reverend sisters, filling various positions, and six brothers, who have the direct charge of stock, farm, gardens and the outside work in general.

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There were 35 Indian boys and 38 Indian girls then enrolled and classified as follows:—

Standard I.	37
“ II.	16
“ III.	10
“ IV.	10
Total.	73

There were, in addition, about a like number of children of mixed blood and whites in attendance.

The Indian children in attendance belong to various reserves within the Edmonton agency.

The pupils displayed considerable interest in their work, and answered in an audible tone. The discipline and training reflected credit on the staff.

There are about 330 acres of choice farming land in connection with this institution, and of this area about 260 acres are under cultivation.

The result of the farming operations for the season of 1905 was reported to be:—

	Bushels.
Wheat.	1,614
Barley.	1,062
Oats.	2,324
Potatoes.	1,500
Turnips.	700

and a supply of other roots and numerous vegetables.

The stock comprised:—

	Head.
Cattle.	150
Pigs.	120
Horses.	20
Poultry.	Large flock

The boys of advanced years assist at all kinds of farm work, care of stock, gardening, repairing implements and repairing harness and footwear. The girls of advanced years do most of the sewing, knitting, tailoring, cooking, pastry-baking, laundry work, general housework and a good deal of fancy-work. Moreover, these girls do wool-carding, spinning, dyeing, weaving, or in short, make most of the cloth which they tailor into garments for the pupils of the institution.

The buildings throughout were in a perfect state of cleanliness, and appeared to meet the requirements with the exception of the building used as a class-room for the junior children, which is too small and antiquated.

This institution is under the auspices of the Roman Catholic denomination.

The health of the pupils was reported to be remarkably good for a long period before I made the inspection.

HOBBEMA BOARDING SCHOOL.

This school is under the auspices of the Roman Catholic Church, and it was inspected during January.

The Rev. Sister St. Jean de la Croix, superioress, is assisted by eight reverend sisters.

This institution is located on the Ermineskin's reserve, and a few hundred yards westerly from a siding on the Calgary and Edmonton branch of the Canadian Pacific railway and known as Hobbema.

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There were 27 boys and 22 girls in attendance, classified as follows:—

Standard I.	18
“ II.	6
“ III.	8
“ IV.	10
“ V.	5
“ VI.	2
Total.	49

There is one large class-room, well lighted and well equipped.

Life and interest in the class-work has been sustained to a marked degree at this institution. In all the standards the pupils are carried along with much uniformity. There are few, if any, dull pupils. The conduct of the pupils appeared to be everywhere good, and that without any noticeable measures of severe restraint on the part of the staff.

A new building was erected since the last inspection at a cost of about \$1,500. It is 24 x 40 feet, with an annex, 12 x 15 feet. The main portion is used for laundry purposes, bath-rooms, storehouse, ice-storage, and a portion of the second floor for an isolated hospital. The annex is used for the storage of vehicles. Under the first floor, directly under the wash-room, is located a cistern with a capacity of about one hundred and fifty barrels.

The health of the pupils has been very satisfactory.

The dormitories were in good order, properly furnished, well ventilated, and like all other portions of the building, scrupulously clean.

The heating appliances in this institution are to my mind faulty. Instead of two large furnaces, there are about a dozen stoves, and in connection with these stoves there are pipes running here and there throughout the building. These stoves and pipes all add, of course, to the fire risk.

About twenty-two acres of land is inclosed, and last season about 260 bushels of potatoes were grown, and, besides, a reasonable supply of turnips, carrots, onions, cabbages and garden stuff.

The boys assist at the gardening, care of stock, and do the chores. The girls are trained in general housekeeping, sewing, knitting, darning, mending and tailoring.

SARCEE BOARDING SCHOOL.

This school was inspected in February.

The Venerable Archdeacon Tims is the principal; Mr. P. E. Stocken, assistant principal and teacher; Mrs. Stocken, matron; Miss Crawford, assistant matron.

This institution is located near the southeast corner of the Sarcee reserve, about 10 miles in a southern direction from Calgary, and is under the auspices of the Anglican Church.

There were 15 pupils enrolled, 8 boys and 7 girls, and they were classified as follows:—

	Pupils.
Standard I.	7
“ III.	2
“ IV.	4
“ V.	3
Total.	15

The pupils read fairly well, but there was room for improvement as regards audibleness, particularly by two of the eldest girls. Writing in copy-books had been abandoned after the cold weather set in, and for the reason, so stated, that the ink

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could not be kept from freezing. As the building is claimed to be a warm one, and the Alberta climate never cold, I am unable to state why the ink freezes. Definitions were given for the principal words in the text, and this led me to the conclusion that the pupils had a fair knowledge of the subject under review.

Fourteen head of cattle are owned by this institution, and three cows were then giving a sufficient quantity of milk for the use of the staff and the pupils. I was informed that sufficient butter was made during the summer months for home use, and that sufficient vegetables were grown to supply the requirements until the cold weather set in. My own impression is that institutions of this kind should have frost-proof cellars and that sufficient roots and vegetables should be grown on the grounds to supply the table for the whole year. It is not a question of whether the roots and vegetables can be purchased more cheaply than they can be grown, but a question of example to the pupils of the schools and the Indians who visit them. There is no better soil for gardening purposes within this province than around and about this school.

The girls advanced in years assist at the general housework, make bread, sew, knit, darn and do laundrying. The boys care for the stock, milk, do gardening in season, and the various chores in connection with the institution.

The dormitories are spacious, clean, fairly well furnished and well ventilated.

The pupils are all members of the Sarcee band. I was told that there were only four children of school age and enjoying good health who were not attending any school. This means that over seventy-five per cent of the Sarcee band, of school age, are receiving some educational advantages.

PEIGAN C. E. (VICTORIA HOME) BOARDING SCHOOL.

This school was inspected in March.

The staff consisted of Rev. W. R. Haynes, principal; Mrs. Haynes, matron; Miss Edwards, assistant matron; Miss McWilliams, teacher. An ex-pupil, Hartwell Bigbull, was employed up to the end of January as outside choreman, but had resigned to go home on the reserve to complete a house for a home for himself and his intended wife.

This school is located just outside of the Peigan reserve, and it is under the auspices of the Anglican Church.

There were 15 boys and 16 girls enrolled and graded as follows:—

	Pupils.
Standard I.	25
" II.	5
" III.	1
Total.	31

In my last report I stated that it was impossible to hear the pupils of this school read when only a few feet distant, and that the attention of both the principal and the teacher was directed to this fact. I am now glad to be able to report some improvement with regard to the audibleness of the pupils when reading or speaking. There is yet a lack of vivacity in the class-room, which in time I hope may be overcome. On the whole the pupils seemed to have made fair progress at their studies. Home-made desks are in use here and they should be replaced by desks of a more modern pattern. In other respects the class-room is fairly well equipped, and meets the requirements.

The industrial work carried on by Mrs. Haynes is commendable. The girls are taught plain sewing, knitting, darning, patching, dress-making, quilting, baking and general housekeeping. One of the girl pupils was soon likely to receive her discharge and become the wife of an ex-pupil. I was shown a full box of quilts, clothing, fancy stand and table-covers and other useful articles that had been made up during spare moments by this girl, under the supervision of Mrs. Haynes, for use in her new home. There is not the same scope for the industrial training of the boys in this institution as for the girls. A little gardening can be carried on, the few stock cared for and the

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chores about the institution, which is about all the industrial work that can be found for the boys to do.

The dormitories are large, well kept, fairly well furnished and capitably ventilated. The buildings were in good condition and tidily kept throughout.

PEIGAN R.C. (SACRED HEART) BOARDING SCHOOL.

This school is located on the Peigan reserve, and it was inspected on March 15.

The staff then comprised Rev. Father Doucet, principal; Rev. Sister St. Louis, superioress; Rev. Sister St. George, teacher; Rev. Sister St. Anne, boys' matron; Rev. Sister St. Mary, girls' matron; Brother John, gardener and general help.

There were 17 boys and 15 girls enrolled and classified as follows:—

	Pupils.
Standard I.	20
“ II.	8
“ III.	4
Total.	32

The pupils read audibly, spelled and gave definitions of the principal words in the lessons, and on the whole I thought fair progress had been made. The weak point revealed in the examination was the defective pronunciation. There was, however, some improvement in this respect over the examination in November, 1904.

The dormitories were well furnished, airy, very clean and as tidy as it was possible to make them. The building throughout was likewise orderly kept. The class-room was well furnished, but too small for the number of children now enrolled.

The girls of advanced years are taught sewing, knitting, darning, dressmaking and general housework. The boys scrub, milk, care for the stock, garden in season and do odd chores.

BLUE QUILL'S BOARDING SCHOOL.

This school is under the auspices of the Roman Catholic Church, and is located on the western portion of the Saddle Lake reserve.

The inspection of this school was made in May.

The staff consisted of the Rev. Father Balter, principal, and eight reverend sisters, as follows: Sister Leville, superioress; Sister Laverty, head teacher; Sister Mayrand, assistant teacher; Sister Nignette, seamstress; Sister Lagoff, assistant seamstress; Sister Legendre, musician; Sisters Celina and Sylvain, cooks.

There were 15 girls and 22 boys enrolled and graded as follows:—

	Pupils.
Standard I.	11
“ II.	7
“ III.	8
“ IV.	5
“ V.	5
“ VI.	1
Total.	37

This was my first visit to this institution, and I was pleased to find it so well conducted. The children read well, audibly, gave definitions of the principal words in the text, and the written work was clean and well done. There are two class-rooms, both of which were well furnished, with the exception that the desks are home-made, and not as suitable for the work as desks of a modern pattern. Both of the class-rooms are too small for the number of children taught therein.

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The dormitories were fairly roomy, well ventilated, clean and with an ample supply of clothing. The bedsteads are all of wood and locally made. Iron bedsteads would be much preferred, and from the fact that they would be more sanitary.

A good deal of difficulty was experienced here in securing a supply of good water. A number of wells were sunk before an ample supply was found, and the good well is some little distance from the home.

The main building is 34 x 60 feet and 3 stories high. This is a good building, but the majority of the outbuildings are third-rate structures.

About 3 acres of land are under cultivation, and in it were potatoes and vegetables, with the exception of about one-eighth of an acre, which is devoted to flowers. This land is neatly fenced, well kept and apparently in a high state of cultivation.

The boys do gardening in season, under supervision, make the bread, mend footwear, care for the stock and care for the dormitory used by themselves. The girls are taught sewing, mending, darning, knitting, general housework, spinning, carding wool and weaving to some extent.

Twenty-eight head of cattle are owned, and of this number 12 are cows, to ensure a good supply of milk.

INSPECTION OF DAY SCHOOLS.

SAMSON'S DAY SCHOOL.

This school was visited on January 15.

It is located on the Samson's reserve, in the Hobbema agency, and it is under the auspices of the Methodist Church.

There were 28 pupils enrolled, which means that 28 children have entered the school-room for a short space of time during the preceding twelve months. The average attendance was less than 3½, and on the day I made the visit there were only 2 Indian children present. Miss Klippert, who holds a third-class certificate, is an efficient teacher and, moreover, she is devoted to the work. The school is located about the centre of the reserve, is a comfortable building, fairly well furnished, and meets the requirements of a day school in every way for the 28 children referred to, if they would only attend it regularly.

LOUIS BULL'S DAY SCHOOL.

This school was visited on January 18.

It is under the auspices of the Methodist Church, and located near the northwest corner of Ermineskin's reserve, and within the Hobbema agency.

There were 11 children reported to have homes within a reasonable distance of this school. The average attendance was about 3, but there were no Indian children present on the day I made the visit.

Mr. A. A. Goodhand was in charge.

I was recently informed that this school had been closed.

SADDLE LAKE DAY SCHOOL.

This school is located on the Saddle Lake reserve, and it is under the auspices of the Methodist Church, with Mr. Leonard, who holds a third-class certificate, in charge.

It was reported to me that there were 30 children of school age and of the Methodist persuasion on this reserve. Of this number the records show 16 enrolled and a recent average attendance of nearly 10 pupils. I may say, however, that this school was closed for a time for lack of attendance, and that the average attendance may soon again be less satisfactory than it is at present.

There were 8 boys and 7 girls present on May 23, classified as follows:—

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	Pupils.
Standard I.	10
" II.	5

I am under the impression that Mr. Leonard would be a successful teacher if the children attended regularly. As they have not done so for any length of time, I have little faith that they will do so in the future; only a start has so far been made, and the advancement now gained will soon again be lost through irregular attendance.

It is not an easy matter for the Indians of this reserve, or for Indians likewise situated on any reserve, to send their children to a day school regularly. They are now trying to do a little farming and make homes for themselves here and there over their reserve. Some of these homes are three and more miles from the school, and small children cannot be expected to travel such distances, through all kinds of weather, regularly to a day school.

The school building is a log-walled structure, in poor condition, and not situated as conveniently as it might be for the children who now attend it irregularly.

GOODFISH LAKE DAY SCHOOL.

I inspected this school during May.

This school is under the auspices of the Methodist Church, and located on the southern portion of Whitefish Lake reserve.

Mr. Vincent Smith is the teacher of this school, and is assisted by his wife.

Seventeen children of school age, and holding the Methodist faith, are reported to be living in the vicinity of the school.

There were 8 boys and 2 girls present, classified as follows:—

	Pupils.
Standard I.	4
" II.	4
" III.	2
Total.	10

The register showed an average attendance for the previous quarter of eight and a fraction.

The children in attendance seemed to be bright and obedient. They read and spoke in an audible tone, and have made some progress on the line of education, possibly as far as they ever will reach, at least those who have attained to standard III.

The school building is of hewn log, shingle-roof, and in a good state of repair.

WHITEFISH LAKE DAY SCHOOL.

This school is located near the northern extremity of Whitefish lake, and it, too, is under the auspices of the Methodist Church.

This school was inspected during May, and I found Miss Annie Whitford in charge. I was told that the teachers have been frequently changed at this school.

Ten children were reported as living within the vicinity of this school, and all said to be of the Methodist faith.

There were 6 boys and 3 girls present on the day I made the visit, and all classified under standard I.

The register showed an average attendance of 5½.

This school, the one at Goodfish Lake and the one at Saddle Lake, have all turned over a number of pupils to the industrial school at Red Deer, and from that standpoint they are entitled to some consideration and credit.

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The Whitefish Lake school building is similar to the one at Goodfish Lake, and in like condition.

The day schools at Joseph's reserve (Roman Catholic) and at Paul's, White Whale Lake reserve (Methodist), have both been discontinued since my last report was written, for want of attendance.

I regret that I cannot report an inspection of all the schools within this inspectorate since my last report was written. This is partially due to the fact that the next fiscal year is to end on March 31, which necessitated the writing of this report three months earlier than reports were previously written.

I have, &c.,

J. A. MARKLE.

Inspector.

MACKENZIE RIVER DISTRICT,
HAY RIVER BOARDING SCHOOL,
ST. PETER'S MISSION, HAY RIVER, CARE OF HUDSON'S BAY COMPANY,
VIA EDMONTON, ALTA., November 15, 1905.

FRANK PEDLEY, Esq.,
Deputy Supt. General of Indian Affairs,
Ottawa.

SIR,—I have the honour to report that the above named boarding school in connection with the Church of England in Canada, of which I am in charge, is located at the mouth of the Hay river, on its east bank, on the southwest shore of Great Slave lake, within the limits of Treaty No. 8. It is not on a reserve, but in the unorganized territory of Mackenzie river, under the supervision of the Royal Northwest Mounted Police.

Land.—We have already under cultivation a little more than 8 acres of Crown lands adjoining the Indian village of Hay River. The soil in the immediate vicinity is flat, alluvial deposit, on a bed of sand, and is adapted for agriculture. A varied growth of timber extends all around us. The land has simply been acquired through settler's possession, and is the property of the mission school.

Buildings.—We have the following buildings: (1) a large dwelling-house, used as our boarding school, composed of three parts successively erected, the last being three stories high, the whole constructed of logs and boards, containing eighteen rooms; (2) a new dwelling-house, 26 x 23 feet, two stories and a half high, with a 25 x 15 feet lean-to, two stories high, is only partially completed, but the lean-to is already occupied by a portion of our staff; (3) a workshop fitted up for carpentering and blacksmithing, and containing a complete saw-pit; (4) and (5) are storehouses in which are kept clothing, provisions and general supplies; (6) wood-shed; (7) fish-house; (8) cattle-byre; (9) hen-house; (10) our church, which is still under construction, having been delayed a whole season owing to the impossibility of securing a few pounds of six-inch nails.

Accommodation.—Our institution is a mission home and school, the age of the pupils ranging from three to eighteen years, though we occasionally receive widows and others as mission helpers, under instruction. We shall have room for about 60 persons under our roofs, and have had as many as 51 within the past year, dating from July 1, 1904. Our numbers have been very much reduced owing to the sad ravages of measles which broke out in the far north and swept south through the whole district in the summer of 1902, carrying away a great many and leaving the survivors constitutionally weakened, so that even as late as 1905 we are still feeling the effects

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of that epidemic, not only in the way of broken down constitutions, but it has reduced the youthful population all over to such an extent as to make it almost impossible to persuade the parents in any community to part with their remaining children, lest they, too, should never return to them again.

Attendance.—The attendance of pupils during the year ended June 30, 1905, was 17 boys and 17 girls, making a total of 34 regulation boarding pupils, besides three native male and four native female helpers under instruction in general industrial work, as well as 13 day scholars who are exceedingly irregular in their attendance.

Class-room Work.—The subjects taught in our institution include reading, writing, arithmetic, composition, grammar, geography, dictation, literature, history, calisthenics and Holy Scriptures, as well as occasional lessons in the reading of their own native language, both as written in the syllabic and in the Roman characters. The pupils are making good progress in their English studies, and are disposed to be more teachable and less troublesome than the same number of white children when they are entirely removed from all intercourse with their relatives. The class hours of late have been from nine in the morning until half-past three in the afternoon, the change being made owing to the increased number of younger children and also the conviction that too many hours of class work is not good for them after the freedom of their native life. In the months of December and January we are obliged to shorten them another half hour, beginning at half-past nine in the morning, owing to the lack of daylight.

Farm and Garden.—The farm produce consists chiefly of a large crop of potatoes, which this year was reduced to nearly half its usual size, or something less than four hundred bushels, and a small crop of barley usually amounting to about twenty bushels. The garden simply represents a small piece of land, fenced separately, in which we grow cabbages, cauliflowers, beets, carrots, parsnips, onions, radishes, lettuce, pease, beans, &c., and used chiefly for the benefit of the staff. Much of the weeding, planting and hoeing is done by the school children under instruction. Our hay-supply is derived entirely from natural grass, found along the river bank. We have at present 4 cows, 2 bulls and 2 spring calves. We train our cows and utilize them with the bulls for hauling purposes, thereby saving the unnecessary keep of oxen, and we find them very satisfactory. We also keep on hand for winter work, such as fishing, meat-hauling and tripping connected with our mission, two or three teams of dogs, the support of which necessitates a good deal of extra work and expense. There are no roads, however, through the country, and no horse-feed stations, so we cannot dispense with our dogs as yet, although we would much prefer the horse. Our hog venture of 1903 has proved a failure up to date, as I have been unable to replace the little boar which the dogs killed about a year ago, owing to the remoteness of our position and the difficulties of live stock transportation. The fowls I brought in with me at that date are on the increase, and last winter one hen laid a batch of eggs in the months of January and February. We keep them in a semi-underground house with plenty of light, and they seem to do well, although we have to warm the house once daily through the extremely cold weather.

Industries Taught.—We have no stated industries, but we aim to teach each one under our care to be thorough, industrious and practically useful. Occasional lessons are given in the use of carpentering and blacksmithing tools when the pupils are old enough for such. The general work on the farm and about the establishment affords ample opportunity for training both boys and girls to be useful.

Moral and Religious Training.—We teach all the pupils to the best of our ability. Obedience, diligence, straightforwardness and frankness, and endeavour generally to develop in them the moral qualities based upon the religion of the Old and New Testament, all our training being under the superintendence and inspection of the bishop of the diocese.

Health and Sanitation.—Prior to the epidemic of measles in 1902, spoken of above, the health of the pupils was very good, but since then there has been a good

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deal of sickness amongst them, and although our death-rate has been very small compared with last year, still we have lost three children within the period my report covers. All of these, however, had been ailing from the time of the measles, and were eventually taken off as a direct result of that scourge. What is true of the pupils applies with certain force to the whole population of this northern land. The medical care and nursing we give them does much to alleviate their suffering and prolong their lives even where we are unable to effect a cure. We take all the sanitary precautions we can so as to check any spread of disease. We fill up our privies yearly and dig new pits, and we throw all the slops and refuse far from the house so as to keep the yard clean and free from infection.

Water Supply.—We derive our supply of water for household use from the river close in front of the house, and it is always good.

Fire Protection.—We keep four barrels of water constantly in the houses, and have ladders reaching to all the roofs: a goodly number of axes and water-buckets are always available in case of fire.

Heating and Lighting.—We heat the main building (No. 1) with seven stoves, and the new building (No. 2) with two stoves as yet, using spruce, which is abundant and good. We light our institute with paraffin candles and coal-oil lamps, the latter being for the use of the staff only.

Recreation.—We encourage the school children to play games in their hours of recreation, especially football, baseball and boating, and permit the older boys to hunt small game in the surrounding bush, and snare rabbits, which abound of late years.

Food Supply.—We obtain the greater part of our food-supply from local sources, setting nets in the lake nearly all the year, and are never without fish on the tables; these, with potatoes, constituting our main diet. What little meat we eat we get occasionally from Indian hunters. The remainder of our provisions, consisting of flour, meal, tea, a little bacon, &c., is annually imported a year or eighteen months ahead, at the expense of the bishop's diocesan funds. None of the pupils at present pay their board.

Clothing.—The school children are clothed principally out of the mission bales, contributed voluntarily by various branches of the Women's Auxiliary of the Church of England throughout the eastern part of Canada, and here again I beg thankfully to acknowledge the liberality of your department of the government in assuming the, to us, very large cost of the transport of these bales.

Mail Facilities.—Our mail service, I am glad to say, is very much improved within the past year, the Post Office Department having come to some definite arrangement with the Hudson's Bay Company, which ensures our having two regular mails carried to and from the door; but unfortunately the dates are such as to make it impossible for me to send this report into the department until nearly five months after the receipt of your circular. We are truly grateful, however, for the guarantee which this affords us of our mail matter being carried safely through both ways with as little delay and chance of straying as is possible considering our remoteness from civilization and its many assured conveniences.

General Remarks.—It may be of interest to bear in mind that most of our children are gathered from distant parts of the country (some having come from Fort MacPherson, a thousand miles north of us), and have to remain with us throughout the entire year, so that we have to find recreation and employment for them during the usual holiday seasons, which adds greatly to our labour, and ties us incessantly to our post. The few day pupils that we are able to secure are very intermittent in their attendance, and the least effort to discipline them is resented by the parents and near friends, who usually allow their children to grow up without any regard to obedience or discipline of any kind; all their own punishment or lack of it depending entirely upon the degree of passion their child's conduct may chance to arouse within them. When it is remembered how many white people, living in the very centres of civilization and Christianity, have no regard for the real future welfare of their

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children and how little effort they put forth to secure them a better education, can we wonder at the utter indifference generally shown by the untutored aborigines of this most distant part of our own fair land? These remarks will help to make it more easily understood why our work seems so slow and why it is oftentimes so discouraging, and yet those who know and labour amongst the Indians longest feel assured that, considering their natural surroundings and inborn ignorance, prejudice and superstition, they give more return and better results in proportion to the amount of money expended upon them than do the sons of their more civilized and more fortunately situated brothers of the pale-faced tribes.

Some slight conception of our surroundings may be realized when it is known that our nearest neighbouring hamlet or trading-post is 80 miles distant, and cannot be reached within two or three days' travel at the least, excepting when the steamers are passing in the summer, which means not more than four or five times at the most, and then there are days or even weeks of delay before one could secure a return passage. In winter our only mode of travel is the slow and tedious dog-train, which necessitates our sleeping under the canopy of heaven for two nights generally or more.

Owing to our exposed situation on the lake, fishing is precarious and often positively dangerous.

Large game, such as moose and deer, is generally very scarce.

Our nearest physician is stationed on Lesser Slave lake, probably 400 miles as the crow flies and 600 as the traveller goes, if not more, from us. The climate here is severe, the temperature falling frequently for days at a time forty degrees below zero, while occasionally it drops to fifty-five and even sixty degrees.

Our summers are delightful, except for mosquitoes. The season is very short, but incessant daylight for more than a month gives us doubly quick growth. We beautify our surroundings with flowers, which grow luxuriantly, and take us back in heart and thought to the realms and charms of our home land.

Finances.—In closing, I have again to say that I am not in a position to present a financial statement of the affairs of our school, as the funds of our mission all pass through the hands of our bishop, the Right Reverend the Bishop of Mackenzie River, Athabasca Landing, Alberta, who settles all our mission expenses, as our supplies are chiefly secured in Winnipeg. He also receives most of the moneys given for the support of our work.

I have, &c.,

THOS. J. MARSH,

Principal.

BRITISH COLUMBIA,

AHOUSAHT BOARDING SCHOOL,

AHOUSAHT, June 30, 1906.

FRANK PEDLEY, Esq.,

Deputy Supt. General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit the annual report of the Ahousaht boarding school for the year ended June 30, 1906.

Location.—The school is situated on a tract of land adjoining Maktosis reserve, on the inner side of Flores island, off the west coast of Vancouver island. It is beautifully situated on a rise of ground overlooking North arm and facing the Cat-face mountains, and affording a view of Herbert arm with its snow-clad peaks.

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Land.—There are 140 acres in connection with the school, but the greater part of it is heavily timbered. A fresh-water lake covering about 15 acres of rich soil is being drained and prepared for gardening and fruit-growing. The land is the property of the Presbyterian Church.

Buildings.—The school building is frame, 46 x 68 feet, with two stories, basement and attic. It has been occupied less than two years, and is commodious and convenient. During the year a wood-shed, 24 x 18 feet, was erected. The school can furnish accommodation for 60 pupils and 5 of a staff.

Attendance.—There are 38 children on the roll, 22 boys and 16 girls. Four boys were admitted during the year and one boy died.

Class-room Work.—Much attention is given this part of the work. The pupils attend forenoon and afternoon. The programme prescribed by the department is followed, and in addition instrumental music is taught to some of the most capable pupils.

The classification at the close of the year is as follows:—

	Pupils.
Standard I.	5
" II.	5
" III.	16
" IV.	10
" V.	2

Industries Taught.—The boys cut wood and assist in carpentry, baking and laundry work. The girls do baking, housework and sewing.

Farm and Garden.—The land is as yet only in a state of preparation for cultivation.

Moral and Religious Training.—Bible study, memorizing of scripture and spiritual culture receive careful attention. Family worship is held morning and evening. Children attend Sabbath services and Sabbath school. The conduct of the children is generally good.

Health and Sanitation.—The children enjoy good health. During the year an epidemic of whooping-cough and gripe passed through the school, but left no serious results. An isolated room is used for any serious or contagious troubles. One of the staff is also a trained nurse. The large lake drain passes near the school, affording excellent drainage.

Water Supply.—Our water is chiefly obtained from rain-fall. The present tank capacity is insufficient, but it is expected provision will soon be made for this deficiency.

Fire Protection.—The protection against fire consists of a dozen buckets, filled and conveniently placed, and seven chemical fire-extinguishers. Fire-escapes are placed at each end of the building.

Heating and Lighting.—A large hot-air wood furnace in the basement heats the building throughout. Coal-oil lamps are used for lighting. Hanging and bracket lamps are used for sitting-rooms and dormitories.

Recreation.—A variety of outdoor games afford recreation when weather is favourable. Indoor games and music furnish entertainment for evenings and rainy weather.

General Remarks.—The kindly interest and assistance of the agent has been of great aid in getting the work here placed on a good basis.

I have, &c.,

(REV.) J. L. MILLAR, B.A.,

Principal.

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BRITISH COLUMBIA,
ALBERNI BOARDING SCHOOL,
ALBERNI, June 30, 1906.

FRANK PEDLEY, Esq.,
Deputy Supt. General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit the annual report of this school for the year ended June 30, 1906.

Location.—This school has a beautiful location. It is built on a plateau about 60 feet above the level of the garden, which it overlooks; at the back of the school the country rises to a higher level, and is heavily timbered, giving abundant shelter from the prevailing winds. In front of the school, and about 200 yards away, flows the beautiful Somas river, and from the school grounds we obtain a splendid view of the river, with Alberni about $2\frac{1}{2}$ miles distant. On the same plateau across the road which divides this property from the reserve, is the Shesaht village; and about 1 mile down the river on the opposite side is the Opitchesaht village.

Land.—There are 126 acres in connection with this school, which is known as lot S1, district of Alberni. One hundred and sixty acres have been added during the year, by purchase. The land is owned by the Presbyterian Church. The land is heavily timbered, and is very expensive to clear; the soil, however, is very good; it is well adapted for all farming purposes, after land has been cleared.

Buildings.—The buildings consist of main building, 38 x 43 feet, three stories high, with wing, 32 x 46 feet, two stories high. The old school building is used for laundry, bake-shop and carpenter-shop. Other buildings are class-room, wood-shed, driving-shed, root-house and hen-house. The hen-house was built during the year, it is 12 x 36 feet, with wire-netting fence for chicken-run, 45 x 36 feet. All buildings are kept in good repair, this spring the interior of the school was all kalsomined.

Accommodation.—There is accommodation for 60 children and a staff of 7.

Attendance.—Eight pupils received their discharge at the close of this quarter, leaving 37 on the roll; 21 boys and 16 girls. Three girls and one boy have been admitted during the year, and 5 boys and 6 girls were discharged. One boy died of heart failure.

Class-room Work.—The programme of studies authorized by the department is followed. During the year good progress has been made. At the end of March, Mrs. Cameron, who had filled the position of teacher for over seven years, was transferred to Swan Lake day school, Manitoba; and the vacancy was filled by the appointment of Miss Gertrude Johnston, who holds a second-class Ontario professional certificate. Mrs. Cameron was a good teacher, and Miss Johnston has already given evidence of successful work.

Farm and Garden.—The stock consists of one horse and seven head of cattle. Several of the boys have learned to milk. Some of the larger boys are good teamsters, they do all ploughing, harrowing, and teaming for the school. Besides some hay for stock, nine tons of potatoes were harvested.

Industries Taught.—Farming and gardening are taught, also plain carpentering, painting, shoe-repairing and baking. This spring the boys and girls made a large drift gill-net, which has been a great help to the school, in giving a supply of fresh fish. The fishing is carried on by the boys.

The girls are taught thoroughly in all departments of housework, and several have shown marked ability. Their work includes cooking, laundry, bread-making, dressmaking, the care of milk and butter, the canning of fruit; also sewing and music. All mending of clothing and darning of stockings is done by the girls.

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Moral and Religious Training.—The conduct of the pupils has been very good; in all their work they are faithful and obedient.

The pupils attend regular Sabbath services, also Sabbath school, and every day religious instruction is imparted to them.

The proximity of the school to the reserve has an elevating effect on the parents of the children, as shown by the higher tone of living, and cleanliness in their homes.

Health and Sanitation.—The health of the pupils has only been fair throughout the year. In the fall we had several cases of tonsilitis, followed by mumps. One boy had rheumatic fever, and his recovery was very slow. Another lad who had tonsilitis followed by mumps, died from heart failure supervening. This spring we had a case of measles, which was immediately isolated, and we are pleased to be able to report it was confined to the one case. At the same time we had a few cases of chicken-pox.

The sanitary condition of the school is good.

Water Supply.—The supply of water is from two wells and the rainfall. A wind-mill also pumps water from the river to a cistern.

Fire Protection.—We have two Carr fire-extinguishers and ten fire-buckets distributed through the building. Our fire-protection as far as a water-supply is concerned, amounts to nothing. More chemical fire-extinguishers are urgently needed.

Heating and Lighting.—The main building is heated by a furnace, the new addition, by stoves. Coal oil lamps are used for lighting.

Recreation.—The boys play football and baseball and other games; the pupils are very fond of swimming and canoeing. In the winter, indoor games are provided.

General Remarks.—The school had the pleasure of a visit last August from the following gentlemen representing the Foreign Mission Committee of the Presbyterian Church, viz.: Rev. R. P. MacKay, D.D.; Rev. Dr. Campbell; Rev. Mr. Henderson and Mr. Hamilton Cassels, K.C.

These gentlemen expressed themselves as pleased with the condition and progress of the school.

Inspector Green visited the school in November. We are always glad to see him, as his kindly help and advice have been very helpful to the welfare of the school.

Recently Miss Craig, representing the Women's Foreign Missionary Society of the Presbyterian Church, inspected the school on their behalf. Miss Craig expressed herself as pleased with the work being done.

I have, &c.,

JAS. R. MOTION,

Principal.

BRITISH COLUMBIA.

ALERT BAY GIRLS' HOME,

ALERT BAY, June 30, 1906.

FRANK PEDLEY, Esq.,

Deputy Supt. General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit the following report of the Alert Bay Girls' Home for the year ended June 30, 1906.

Location.—The home is located on land belonging to the Church Missionary Society. A quarter of an acre is fenced for a vegetable garden at the side of the home, and a flower garden facing seaward gives it a pleasant and homelike appearance.

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Buildings.—The building is of wood, 34 x 32 feet, and comprises dining-room, play-room, kitchen, laundry, and matron's sitting-room, dormitories, with suitable bedrooms upstairs.

Accommodation.—The building is capable of accommodating 15 girls and 2 officers.

Water Supply.—There is a good supply of water obtained from a spring at the back of the home.

Fire Protection.—Two 'Star' fire-extinguishers, 1 axe and 6 fire-buckets, all supplied by the department, are kept ready for use. A large tank is kept full of water.

Remarks.—The home has been closed since last June, as no suitable matron could be obtained.

I have, &c.,

A. W. CORKER,

Principal.

BRITISH COLUMBIA,
PORT SIMPSON BOYS' BOARDING SCHOOL,
PORT SIMPSON, July 3, 1906.

FRANK PEDLEY, Esq.,

Deputy Supt. General of Indian Affairs,
Ottawa.

SIR,—I have the honour to forward the annual report of the Port Simpson boys' boarding school for the year ended June 30, 1906.

Location.—The school is situated 350 yards from the ocean front, on a slight elevation at the northeast of the Indian village, on the Tsimpsean reserve.

Land.—The school is built on a lot, 2 chains by 4 chains. It belongs to the Missionary Society of the Methodist Church, having been obtained by them from the Indians. It slopes both ways to a ravine that runs through the centre of it and drains it thoroughly. It is well adapted for the raising of hay, small fruits and vegetables. Raspberries, gooseberries, red and black currants and strawberries grow plentifully. Rhubarb, turnips, lettuce, carrots, beets, onions, cabbage, cauliflower, &c., are easily raised in sufficient quantity to supply the needs of the school.

Buildings.—The school is a frame building two stories high, with a cellar. There are besides a separate building used as a play-room, a wood-shed, a drying-shed and a stable.

Accommodation.—The buildings have accommodation for 27 pupils and a staff of 3 or more.

Attendance.—Twenty-five pupils were enrolled during the year, and 1 was discharged.

Class-room Work.—The work in the class-room has been fairly satisfactory. The present classification is as follows:—

	Pupils.
Standard I.	4
" II.	4
" III.	13
" IV.	2
" V.	2
Total.	25

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Farm and Garden.—This is confined to a small garden, in which sufficient small fruits and vegetables are raised to supply the school.

Industries Taught.—These comprise carpentry, cobbling, general housework (baking, mending, washing, &c.), and gardening. The boys nearly all show an aptitude for manual training.

Moral and Religious Training.—Moral and Religious instruction is given daily.

Health and Sanitation.—The health of the boys has been remarkably good. There has been very little illness of any kind, and none of a serious nature. The premises are in good sanitary condition.

Water Supply.—Water is brought to the house by a flume, and during most of the year the supply is plentiful.

Heating and Lighting.—The school is heated by coal and wood stoves. It is lighted by coal-oil lamps.

Recreation.—The playground is on an elevation overlooking the village, and has a good view of the ocean. The boys play football and other outdoor games in fine weather, and in bad weather they amuse themselves with various indoor games, reading, music, &c.

I have, &c.,

J. C. BUTCHART, B.A.,

Principal.

BRITISH COLUMBIA,

PORT SIMPSON (CROSBY) GIRLS' HOME,

PORT SIMPSON, June 30, 1906.

FRANK PEDLEY, Esq.,

Deputy Supt. General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit the following report of the Crosby Girls' Home, for the year ended June 30, 1906.

Location.—The school is located at Port Simpson, and is situated just outside the limits of the Tsimpsean reserve.

Land.—The land lies in section 4, township 1, range 5, coast district. It is owned by the Women's Missionary Society of the Methodist Church of Canada, and was acquired by purchase from Mr. Gordon Lockerby, Port Simpson. There is an area of 2 acres, which is well fenced, but only about one-fourth of an acre is cultivated. We have been levelling a piece of ground this year for a suitable playground for the girls. The land lies on the slope of a hill, the greatest elevation being toward the south and east. With thorough drainage the soil would be suitable for raising vegetables and small fruits.

Buildings.—The buildings consist of a house with three stories and a basement, a tank, chicken-house, wood-shed, drying-shed and water-closets. We have had the kitchen ceiled and painted and a new fence built around the chicken-yard.

Accommodation.—We have good accommodation for 45 girls and 4 teachers.

Attendance.—The average attendance is 44.24. The total enrolment is 50. Six have been discharged, one of whom died afterwards, and one is on leave of absence on account of defective eye-sight. Six have been admitted during the year. The present number in attendance is 44.

Class-room Work.—The classes have made good progress. Three have been promoted to standard II, eight to standard III, nine to standard IV, six to standard V, and two to standard VI. The pupils speak English fluently, and the girls admitted during

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the year have learned to speak English quickly. We are pursuing the same course of study as that used in the public schools of British Columbia. The subjects taught are reading, writing, arithmetic, spelling, dictation, grammar, composition, geography, history, hygiene, music, Bible history and the Methodist catechism.

Twelve girls have taken lessons on the organ, and Mrs. (Rev.) J. Grenfell gave the whole school lessons in vocal music, including sight-singing, once a week. One girl is organist for the Sunday school, another for the mission band, while two or three others play fairly well. The present classification is as follows:—

	Pupils.
Standard I.	11
" II	10
" III.	8
" IV.	12
" V.	7
" VI.	2
Total.	50

Garden. —A small vegetable and flower garden is cultivated, as well as red and black currants and gooseberries. The cost of labour for draining and breaking up the ground has deterred us from having a larger garden, but we hope to increase the area cultivated every year a little.

Industries Taught.—The industrial teaching consists of instruction in general housework, laundry work, cooking, bread-making, dressmaking, sewing, mending, darning and fancy-work. Some of the older girls have taken a special course in cooking, and most of those who have been discharged from the home cut and make their own dresses very neatly.

Very satisfactory progress has been made in every department, and even the smallest girls can sew on patches and darn stockings very neatly. The girls under the supervision of their teachers perform satisfactorily all the work of the institution, including kalsomining, painting woodwork, oiling floors and feeding and caring for chickens. Those who have gone to help others have given good satisfaction as general servants.

Moral and Religious Training.—The pupils are carefully trained to be honest, truthful, obedient, industrious, kind and obliging.

A Bible lesson is taught every day, and religious instruction given by the pastor in the school once a week.

The girls have improved, are more contented and obedient, and we hope the lessons taught will bring forth the fruits of right living in the future.

Health and Sanitation.—The sanitary condition is good, and when the drains and sewerage system is completed will be excellent. The general health has been good, with a few exceptions. We had an epidemic of whooping-cough, but the patients were kept isolated, so it did not become general, and no deaths occurred. All are in good health now except one pupil, who has an extended vacation on account of sore eyes. One who left the home over a year ago died of consumption.

Water Supply.—The water-supply is derived principally from a mountain stream at some distance from the house, and the water is conducted by a flume to a large tank holding 4,000 gallons. The rain-water from the roof also flows into the tank. The water passes through a filter before entering the tank, and is distributed through the house by means of pipes.

We have hot and cold water on two floors. Our water-supply is excellent and abundant.

Fire Protection.—We have fire-escapes furnishing means of escape from the two upper flats and from all the dormitories. Besides the fire-escapes, which we have tested and proved satisfactory so that we could get the pupils out through them in ten

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minutes, we have two stationary ladders on the roof and two from the ground to the roof. We have also two light movable ladders. Buckets of water and of ashes are kept always in readiness on each flat and in the attic, and eighteen pails are available in case of fire. We have two chemical fire-engines and a fireman's axe.

Mention may also be made of the village fire brigade, within call in a few minutes. They rendered efficient service when a spark from a burning chimney caught on the roof, and it was quickly extinguished.

Heating and Lighting.—The heating of the institution is accomplished by six stoves, one French range and one open grate. We use soft coal and wood.

Coal-oil lamps are used for lighting, bracket and hanging lamps being used exclusively for the girls' apartments.

Recreation.—Regular hours are set apart for recreation each day. In wet weather they play in a play-room, where the air enters freely.

This recreation consists of games, physical culture, such as club-swinging, drill and calisthenic exercises, walking, playing on the beach and general play. Exercise in the open air is encouraged and insisted upon. We hope soon to have basket-ball for the larger girls.

General Remarks.—Two girls were discharged to be married last August, and both seem to be doing well. Another who went to Massett last October was married in April to a half-breed, and is now living in Vancouver. A girl who was discharged last September is with her father at Lak-al-zap, Nass river, and is putting into practice the lessons learned in the school. Another pupil had a very nice wedding here, April 30. She is a clever girl, a good cook and housekeeper, and can make her clothes well. I am sure she will keep her home neat and tidy. She plays and sings well. The other girl who was discharged on account of her health died May 4. She was a sweet Christian girl, and we miss her very much.

We had our usual Christmas festivities—a concert for the white people on Christmas night and an entertainment for the parents and friends of the girls the next evening. We had refreshments and a social hour after the programme. About New Year's a reunion of the married girls and their husbands in the home was much enjoyed by all.

One feature of our Christmas programme was a number of physical culture exercises by the pupils. We had also drills, songs, choruses and instrumental selections.

The changes in the staff are that Miss Baker is ably filling the place of assistant matron since Miss Burpee left, and Miss Schofield has taken charge of the sewing department.

Our kitchen is much improved by new oiled cedar ceiling. The rest of the wood-work has been painted and the floor oiled.

We were pleased to have a visit from Mrs. Ross and Mrs. Strachan, the president and secretary of the Women's Missionary Society, last August.

On account of the larger girls leaving and the small girls taking their places, the work has been heavy for the larger girls in the home, but it has been performed faithfully and cheerfully. They are a happy band of girls, and we hope they will grow into useful, cheerful Christian women.

I think the home was never in a better condition morally, and we are striving each year to get nearer to our ideal in life and character.

I have, &c.,

HANNAH M. PAUL,

Principal.

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BRITISH COLUMBIA,
SECHELT BOARDING SCHOOL,
SECHELT, June 30, 1906.

FRANK PEDLEY, Esq.,
Deputy Supt. General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my first annual report on the Sechelt boarding school, for the year ended June 30, 1906.

Location.—The Sechelt boarding school is pleasantly situated on rising ground, about a quarter of a mile from the shore of Trail bay, on the Sechelt reserve. It commands a beautiful view of the waters of the gulf of Georgia and the mountains on Vancouver island. (Group I.—Comox Atlin electoral district.) The post office address is Sechelt, B.C.

Land.—In connection with the school, there is about 3 acres of land, divided into playgrounds, orchards, vegetable garden and flower garden. The soil, though sandy, is suitable for garden purposes. We commenced the garden only last spring, and vegetables of every kind are growing very rapidly.

Buildings.—The main building (which is with the east and west wings, 83 x 36 ft.), contains on the first floor, entrance hall, boys' parlour, children's dining-room, private dining-room, girls' school-room, sewing-room, girls' parlour, private room, parlour. On the second floor are the boys' lavatory, the boys' school-room, a dormitory, a lavatory, and an infirmary for the girls, and the principal's room. On the upper floor, dormitory and bath-room for the boys, private room, and the girls' dormitory and bath-room.

The north wing, which is 30 x 28 feet, is divided on the first floor as follows: kitchen, dining-room, pantry. The second floor comprises two rooms for the staff and an infirmary for the boys, while on the third floor is the chapel. All the rooms are well ventilated and have high ceilings.

Attendance.—The year opened with 46 pupils in attendance, and closed with 41; 3 new pupils were enrolled; 4 names were taken off the roll, 3 died, and 1 is on sick leave.

Class-room Work.—The course prescribed by the department is followed, and the children are making rapid progress. They evince a desire to learn and improve themselves, and everything relating to their studies seems to interest them.

Farm and Garden.—This work is very progressive and encouraging. We have a vegetable garden, two orchards, a front flower garden, in which the boys are regularly employed every day. The boys of the school cleared the ground from all stones and stumps and they do all the work of the garden. It is the sort of work they like very much.

Industries Taught.—All endeavours are used to teach the girls how to become clean and orderly housekeepers. They are taught baking, cooking, laundrying, hand and machine-sewing, darning, mending, knitting, crochet-work, &c. Making baskets is another form of manual work which delights them.

The boys, on a small scale, are taught gardening, and are employed in cutting and carrying wood.

Morals and Religion.—To this part of education particular attention is paid. A certain time every day is devoted to Christian doctrine, and morning and evening prayers are said in the chapel. The moral conduct of the children has been excellent during the past year.

Health and Sanitation.—In November, whooping-cough broke out among the children. All sanitary precautions were taken to stop the contagion, without

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success. Many of the small children, especially the girls, suffered long and severely. Three died; 2 are not well yet; all the others enjoy excellent health. The school-house has been thoroughly disinfected.

Water Supply.—The water comes from a lake about 4 miles distant. The supply is very good except for three months (July, August and September). Between the lake and the tank, which is about a mile from the building, the water runs into a flume. This flume gets dry and we have no water during these months, there being no spring near.

Fire Protection.—The department granted to our school six fire-extinguishers, twenty-four fire-buckets, two hundred feet of hose. They are distributed in the building in case of fire.

Heating and Lighting.—Heating is done with wood used in air-tight stoves. Light is supplied by coal-oil lamps.

Recreation.—Regular hours are set apart for recreation every day, and the children take a walk almost daily. The girls are provided with swings, croquet, balls, skipping-ropes, &c. The games enjoyed most by the boys are baseball, football, lacrosse, marbles, swimming, boating, &c.

General Remarks.—Under this heading, what we most desire to express is our gratitude to the department for its grant to the school, and for its assistance in the shape of \$2,500 in helping us lessen the debt on the building.

We wish besides to thank Mr. Green and Mr. McDonald for their kind assistance and advice at a time when we felt the most keenly the difficulty of placing the school in proper running order.

And we wish also to add a word of appreciation and thanks for Mr. Vowell, whom we have not had the pleasure of seeing, but who has interested himself in our behalf and has kindly sent us illustrated magazines, which pleased the children very much.

I have, &c.,

SISTER THERESINE,

Principal.

BRITISH COLUMBIA,

SQUAMISH BOARDING SCHOOL,

NORTH VANCOUVER, July 2, 1906.

FRANK PEDLEY, Esq.,

Deputy Supt. General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit the annual report of the school under my charge for the fiscal year ended June 30, 1906.

Location.—The Squamish boarding school is beautifully located on the north shore of Burrard inlet, opposite the city of Vancouver, and about 4 miles therefrom.

Land.—The land connected with the school is the property of the Sisters of the Holy Infant Jesus, in charge of the school, and consists of about 14 acres, of which about 4 are under cultivation.

Buildings.—The new building consists of: entrance hall, two parlours, a large school-room and a work-room; on the second floor are the chapel, vestry, and rooms for the members of the staff; the upper story is taken up by a large dormitory for the girls; on each floor are bath and toilet rooms. In the old building are: the kitchen, two dining-rooms, store-rooms, school-room for the boys; on the second story are two dormitories, the principal's room, the boys' and girls' infirmary, and some bed-rooms for the teachers.

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The outbuildings consist of wood-shed, storerooms, hen-house, barn and laundry. This last building has been greatly improved, and consists of a wash-room provided with twelve wash-tubs, each having a tap for hot and cold water; boiler-room with two large boilers and a heater, and the drying-room with everything convenient to spread and dry the clothes during winter.

Accommodation.—We have accommodation for about 70 pupils and for a staff necessary to look after them.

Attendance.—The number of pupils authorized by the department for this institution is 50, but the actual attendance is 62.

Class-room Work.—The course of studies prescribed by the department is well carried out, and a very marked improvement is noticeable all through.

The school hours are from 8.30 to 12 a.m. and from 4 to 6 p.m., with a quarter of an hour intermission both in the forenoon and in the afternoon. The subjects taught are: reading, spelling, writing, arithmetic, grammar, composition, dictation, geography, Roman Catholic catechism, drawing, and also vocal and instrumental music. At the end of the year the pupils were graded as follows:—

Standard I.	24
“ II.	12
“ III.	14
“ IV.	5
“ V.	3
“ VI.	4
Total.	62

Farm and Garden.—About 2 acres of land are laid out in vegetable garden, orchard and flower beds; all of them are well kept, and fair crops are raised every year.

Industries Taught.—The boys are taught the care of horses, cattle, gardening in summer; preparing fuel, shoe-mending in winter; they also have the care of their own apartments: dormitories, class-room and dining-room, under the supervision of one of the Sisters. The girls are taught all kinds of housework, such as baking, cooking, laundrying, knitting, mending, darning, hand and machine sewing; also all sorts of fancy-work, in which they show great skill and aptitude.

Moral and Religious Training.—This is carefully attended to, as being the only sure foundation on which to build up a truly useful life, and I am pleased to state here that the general conduct of the pupils without any exception has been most satisfactory. The discipline is enforced almost exclusively by means of religious exhortations, prizes and distinction of honour; morning and evening prayer is said in the chapel, and the pupils attend all the religious services held in the mission church.

Health and Sanitation.—The general health of the pupils has been very satisfactory, although one boy and one girl died from pneumonia. The sanitary condition of the school is good.

Water Supply.—The building is connected with the city water-supply, and thus abundantly supplied with pure crystal water.

Fire Protection.—Two Stempel fire-extinguishers, 8 glass-lined chemical extinguishers, 2 dozen buckets, 300 feet of rubber hose, 2 axes and 2 ladders are kept in readiness for use.

Heating and Lighting.—The buildings are heated by wood stoves, and for lighting we use coal-oil lamps.

Recreation.—Football, baseball, lacrosse and races are the boys' favourite sports, while the girls delight in reading, drawing, dressing dolls, &c.; in summer, picnics and berry-picking are most enjoyed by both boys and girls.

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General Remarks.—In conclusion, I beg to thank the department for supplying the school with school material, such as maps, books, &c. I also feel indebted to our superintendent, Mr. A. W. Vowell, our inspector, Mr. E. A. Green, and our agent, Mr. R. C. McDonald, for their co-operation in all matters connected with the school. I wish also to express my gratitude to the different members of my staff.

I have, &c.,

SISTER MARY AMY,

Principal.

BRITISH COLUMBIA,

ST. MARY'S MISSION BOARDING SCHOOL,

MISSION CITY, July 1, 1906.

FRANK PEDLEY, Esq.,

Deputy Supt. General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit the annual report of this school for the year ended June 30, 1906.

Location.—The St. Mary's Mission boarding school is situated in the Fraser valley, 43 miles east of the city of Vancouver. Standing on a charming plateau on the northern bank of the river whose serpentine course can be followed thence for over 20 miles, our buildings face the prosperous Matsqui prairie, and command a beautiful view of the Sumas and Cheam mountains, as well as the picturesque Mount Baker, across the boundary line. The neighbouring forests of fir and cedar combine with the fruit plantations and the various crops of cereals and hay, in making the scenery lovely and giving the air wholesomeness and fragrantcy. Comfortable steamers plying daily between New Westminster and Chilliwack, also the nearness of the Canadian Pacific railway, with a line branching off from the Mission towards southern points, give our pupils and their parents every facility of access to the school.

Land.—Some 300 acres of land are attached to the school. The larger part of it lies under heavy timber, so that the progress of the axe and plough is slow and costly. However, every year, with the help of the larger boys and some hired men, when finances allow it, the forest is robbed of a few more acres and our improved land proportionately increased. The farm is the property of the Oblates of Mary Immaculate. It lies in the Mission City district municipality, section 2, townships 3 and 4. The soil yields good crops of hay, roots and vegetables, but perhaps is best adapted for fruit-culture.

Buildings.—The boys' department consists of a main building, 75 x 33 feet, with a newly erected wing, 50 x 35 feet. The first floor contains entrance-hall, parlour, chapel, school-room, kitchen and dining-rooms. On the second floor are the library, the infirmary, with adjoining toilet and bath-rooms, the principal's bed-room and office, the teachers' private work-room and several bed-rooms for the male part of the staff and visitors. The third floor contains the dormitory and two toilet-rooms, besides another large room which can be made a comfortable dormitory. Last spring the building was repaired throughout. Most of the floors have been renewed, the walls and ceilings have been covered with a good layer of mural or tastefully papered; the woodwork varnished or neatly painted, and in the most conspicuous halls and apartments skilfully grained in imitation of oak or ash. Another building, 45 x 24 feet, attached to the main one, contains two class-rooms, band-room, shoemaker and carpenter shops and two bed-rooms.

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The girls' school consists of a main building, 75 x 33 feet, with a wing 45 x 24, and includes entrance-hall, parlours, class-room, sewing-room, chapel, dining-room and kitchen, recreation-room, dormitory, bath-room and toilet-rooms. The outer buildings comprise a play-hall, laundry, store, wood-shed, stables and barns.

Accommodation.—There is accommodation for about 90 pupils and the necessary staff.

Attendance.—There has been an average attendance of 85 pupils.

Class-room Work.—The class-room work is ably and devotedly carried on by 4 Sisters of St. Ann. The school hours are in the morning from 8 to 11.45, with two fifteen-minute intermissions, and in the afternoon from 4.30 to 6. The organ and band practices take place at 1 p.m. in the summer-time, and at 8 p.m. in the winter-time. It is the endeavour of the teachers not to depart from the official programme of studies prescribed for the Indian schools. However, penmanship and arithmetic are given special attention, they being deemed of capital importance. That music trains the character is carefully borne in mind. Rev. Brother Collins is the leader of a disciplined and well-trained brass band, an object of frequent praise from inspectors, visitors and other guests. I may mention also the girls' and boys' choir, which, under the guidance of Rev. Sister Mary Rogation, adds considerable enthusiasm and attention to the Sunday services, and occasionally enlivens our recreations with many a song.

Farm and Garden.—This season about 30 acres are sown in wheat and oats, and the crop looks splendid. Last year all cereals were more or less spoiled by rain, and some oats was altogether lost. About 40 acres are under hay, clover and timothy. The orchard is extensive and yields annually a large amount of fruit. The cherry crop in particular has been this year extraordinarily rich. This year all the trees appear healthy.

Industries Taught.—This school being only a boarding school, it is impossible for want of means to do much as regards trades. However, the larger boys manifesting a strong desire to learn a trade of some kind, it has always been the aim of the management to initiate them into at least the rudiments of carpentering and shoe-making. All the boys are thoroughly instructed in different branches of farming and gardening. They are taught dairy work and shown how to take care of the live stock. They help in putting in the crop and in harvest-time they render valuable assistance to the employees. As a matter of fact, most of our ex-pupils are farmers whose skill and prosperity are much above that of their tribesmen who have not enjoyed the benefit of education. I shall make only reference to Aleck Tommy, of Chilliwack, who is the owner and manager of a ranch, with a goodly herd of cattle, which many white men might envy.

The Sisters of St. Ann teach the girls cooking, general housework, sewing and dressmaking. Their pupils are quite clever with the needle, and many of them cut and make their own dresses and those of their smaller companions. Knitting and crocheting and embroidering are also taught successfully.

Moral and Religious Training.—To maintain a high moral tone in the school is the object of our constant efforts. By daily religious exercises and the teaching of the Roman Catholic doctrines, illustrated with examples from profane and sacred history, the children are persuaded to listen to the voice of their conscience. They are vigilantly trained to self-respect, truthfulness and other Christian virtues. In fine, no pains are spared to refine their character, elevate their sentiments and make them good Christians and useful citizens. It is my pleasure to certify that good results are obtained.

Health and Sanitation.—This year has been an exceptionally healthy one for the girls. With the exception of a few cases of tubercular swelling, no one has been on the sick list. Amongst the boys we had quite a number of cases of pneumonia, but, thanks to the skill and devotedness of Dr. Stuart, every boy was out of danger in only a few days. There have been a few cases of scrofula, which developed suddenly in children who had always appeared healthy. Two of them were discharged on that

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account. All possible material comfort is provided. Our sanitary system has been pronounced perfect by local physicians, whom we had called to inspect the institution and advise us in hygienic matters. The ceilings are high, the rooms brightly lighted and well ventilated. Thanks to the reverend Sisters, the children's clothes are clean, and the houses are kept exquisitely neat and gay.

Water Supply.—The St. Mary's creek flows through our property, affording to the school a healthy supply of water, which is carried in pipes through the entire buildings.

Fire Protection.—Every year we had a beginning of fire in one house or the other. This year to prevent the sparks from the chimneys putting fire on the roof by falling on the shingles, we had the roofs of the college and convent covered with corrugated sheets of iron. This gives, too, a better appearance to the buildings. The fire-fighting appliances consist of 8 chemical fire-extinguishers, 4 fireman's axes, and 48 pails constantly filled with water and placed in convenient positions in the several flats of the buildings. While the younger pupils are taught how to seek safety by means of fire-escapes, the larger ones are regularly drilled in the use of fire-appliances.

Heating and Lighting.—The buildings are heated with stoves. There is a large quantity of fir, birch and other wood to be had in the vicinity. Light is supplied by means of lamps.

Recreation.—The attractiveness of the school is much increased by the great interest our pupils manifest in the various games and sports in which they are encouraged to indulge. The playgrounds are extensive, well situated and cleanly kept. When outdoor exercises are impracticable, the children are kept inside with all sorts of games, singing and band-practising.

General Remarks.—I take pleasure in saying that we breathe here an air of peace and harmony. The example of charity and sympathy set by the staff is reflected in the doings of the whole community.

Before closing, I beg leave to express my feelings of gratitude to Mr. R. C. McDonald, our Indian agent, who is so prompt and courteous in his correspondence, and whose cheerful visits never fail to bring us a sunny day; to Mr. Green, inspector of Indian schools, who takes a keen interest in our institution, and to Superintendent A. W. Vowell, who, not being satisfied with kind words, gives us a substantial and never-flinching support.

I have, &c.,

CHAS. MARCHAL, O.M.I.,

Principal.

BRITISH COLUMBIA.

YALE (ALL HALLOWS') BOARDING SCHOOL,

YALE, June 30, 1906.

FRANK PEDLEY, Esq.,

Deputy Supt. General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit the annual report for the All Hallows' boarding school for Indian girls, under the management of the Sisters belonging to the Church of England community of All Hallows.

Location.—This school is situated about a quarter of a mile from the Canadian Pacific railway station of Yale. It stands on the right bank of the Fraser river, at the foot of one of the Cascade mountains. It is not on a reserve. The buildings are very picturesque, and are covered with climbing roses and honeysuckle.

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Land.—The grounds are well laid out, and are about 7 acres in extent, in the township of Yale. This land was bought by friends of the school, the Dominion government contributing \$500 towards the purchase. It is held in trust for the school.

The property is bounded on one side by a deep ravine, through which rushes a rapid mountain stream: in front, below a high bank, flows the Fraser river, only separated from the school land by the Canadian Pacific railway line and the government road. At the rear of the buildings the mountains rise abruptly.

Part of the land is well adapted for fruit-growing, about half an acre of orchard bearing cherries, plums and small fruits abundantly.

Buildings.—These consist of a large school-house containing dormitories, school-room and living-room, besides smaller bed-rooms, work-room, clothing-room, wash-house and two bath-rooms: a school chapel and a house for teachers and visitors. A small detached building is fitted up as a small extra dormitory, and allows for an increase of four beds.

Accommodation.—The present addition enables us to accommodate 38 pupils, while the staff can be increased to any desired extent.

Attendance.—All the pupils are boarders, and only a small number of them leave the school for holidays of three weeks' duration during the summer with the sanction of the department.

Class-room Work.—The school-room is under the charge of a capable and fully qualified teacher, Miss Kelley, B.A., of Trinity University, Toronto. She has been assisted this year by Miss Harris, a public school teacher with fifteen years' experience. The girls are taught fancy drills and class-singing by Miss R. Moody, who received her musical education in England and at the Dresden Conservatorium. Drawing is taught to the pupils of the senior division in the school-room, and they are entered as they show ability for it in the examinations of the Royal Drawing Society of Great Britain and Ireland, which are held annually at the school.

The pupils of the senior division are also taught dressmaking and fancy needle-work. The girls in the junior division are taught plain sewing and mending.

A Sister has charge of the religious training of the children. The chaplain, who resides in Vancouver, visits the school for religious instruction every fortnight.

Garden.—Half an acre of fruit-trees provides fresh fruit and abundance of jam for the school during the entire year. Vegetables are also grown, but the soil is too light to grow heavy root crops. Parts of the grounds are laid out with lawns and flower beds, and the girls each own a small plot of ground, from 4 to 5 feet square, for cultivating themselves. Prizes are awarded to the owners of the best kept gardens.

Industries Taught.—The girls are thoroughly instructed in all branches of domestic service, and the older ones in cooking, bread-making and laundry work.

Moral and Religious Training.—Religious instruction is imparted daily, and religious motives are instilled into the children's minds as being the only right principles of action. The girls attend service in chapel twice a day and three times on Sundays. Once a week they attend choir practice, learning to sing the hymns, chants and psalms in English. Two of the girls have been taught to play the violin, and they now form part of the chapel orchestra.

Whenever there is a service for the Indian adult congregation in the school chapel, and this happens about twelve times a year, the children are allowed to attend, and are taught to take their part in the portion of the service sung in the Indian language, with orchestral accompaniment.

Health and Sanitation.—On the whole, the health of the school has been very good. Influenza has claimed its victims: in three cases it turned to pneumonia, leaving the patients very delicate afterwards, and in six cases it tended to develop glandular trouble and other diseases of a scrofulous nature. Owing to the healthy situation of the school, however, and its partial isolation, we have escaped all serious epidemics such as whooping-cough, measles, scarlet fever and mumps, which have been prevalent elsewhere since the spring.

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The sanitary condition of the buildings is very good. The drainage was inspected and thoroughly repaired in the spring.

Water Supply.—There is a plentiful supply of excellent water, afforded by a mountain stream close to the house. The water is received in a large cistern inclosed in a stone tank-house, whence it is distributed throughout both houses by means of iron pipes, while the overflow runs into a flume and is used for irrigating purposes in the vegetable garden.

Fire Protection.—Five 'Star' fire-extinguishers are on hand, but we cannot say we have found these very efficacious—dealing with small bush-fires near the house, the stream is so thin and wanting in force, and charging the machines with the proper chemicals is rather a troublesome and expensive business.

Our chief protection from fire is afforded by our excellent water-supply. Water is laid on in both stories of the main buildings. About 150 feet of garden hose is in constant use, and can be utilized for fire in case of necessity.

There are 2 ladders with hook attachments on the premises, besides an axe and 30 fire-buckets.

In reference to our water-supply, we find our tank needs repairs, and we are advised to build higher up so as to secure a fall of from 75 to 100 feet of water. With this arrangement we may be able to put in a plant and secure electric lighting for the house.

Heating and Lighting.—At present coal-oil lamps and candles are used for lighting purposes.

The buildings are heated throughout by wood and coal stoves, the pipes passing, in every instance, through brick chimneys.

Recreation.—An hour's walk (in suitable weather) is taken by the girls, under the supervision of the assistant teacher. When lessons and work permit, and during the intervals specially set apart for recreation, a large playground containing swings, see-saw and summer-house is in constant use; when the weather is inclement games, needle-work or reading are resorted to in the large recreation-room indoors.

During the summer months picnics are allowed almost every week, and if the weather is warm the children are allowed to have one or two meals out of doors. Lessons are also frequently done out of doors, as we believe that fresh air is a great factor in keeping people healthy.

Expeditions for climbing the mountains after huckleberries, blackberries and wild strawberries are a regular part of our programme during the months of July and August.

General Remarks.—At Christmas-time the children always have one grand annual Christmas dinner with all the staff and any 'old girls' of the school who are able to visit us. They also have a Christmas-tree, to which festivity their Indian friends and relatives are invited. Last year a party of sixty adult Indians visited the school and took part in this function.

The second great event of the school year consists in the annual closing exercises and prize-giving, which always takes place about June 15. The following account of this entertainment was sent to the local papers by one of the guests who were present at it:—

ENTERTAINMENT AT CLOSING OF INDIAN SCHOOL AT YALE.

The closing of the Indian girls' school at Yale was celebrated on Thursday by an entertainment given entirely by Indian girls.

Any one having doubts as to the capability of Indian children would have been agreeably surprised at the excellence of the singing, recitations and violin playing of the girls.

There are thirty-five Indian girls at present under the instruction of a very competent staff of teachers.

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The school-room was well filled with the pupils from the Canadian school, visitors from the village of Yale, together with the Sisters and staff of the Canadian school. Among the visitors we noticed two old Indian school pupils; one of them, who is married, having brought her two little ones to stay with her at the old school for a week's holiday.

The prizes were announced by the chaplain of the school, the Rev. H. Underhill, and presented by Ven. Archdeacon Pentreath as follows:—

Scripture—Senior division (Bishop's prize).....	Flossie Porteous
Junior ".....	Jennie Newhi-in-ko
Infants' ".....	Hilda Ma-kwat-ko
Class prize—Standard VI.....	Therese Philipine
" V.....	Josephine Skamee
" IV.....	Sarah I-xalt-sah
" III.....	Anne Duncan
" II.....	Hilda Ma-kwat-ko
" I.....	Agnes Emmmin-mat-ko
Writing—Senior division.....	Suzanne Schout-i-mich
Junior ".....	Hilda Zil-tat-ko
Canadian History—Senior division.....	Beatrice Lasher
Needlework—Senior division.....	Gina Lasher
Junior ".....	Elsie Hist-ko
Housework.....	Anne Duncan
Bread-making.....	Elizabeth Tóo-sha, Therese Philipine, Sophie She-a-mak
General improvement—Senior division.....	Sophie She-a-mak
Junior ".....	Nellie Ska-ka-mee
Church catechism.....	Flossie Porteous
Good conduct—Silver medal.....	Hilda Zil-tat-ko

The programme rendered by the children was as follows:—

1. Song—'O golden days of summer'.....by the Senior singing class
2. Recitation—'Caught at last'.....by the Little ones
3. Handkerchief drill and song.....Junior class
4. Violin solo—Mendelssohn 'Song without words'.....by Katherine Mah-ah-lee
5. Song—'Who killed cock robin?'.....Senior singing class
6. Recitation—'Under the cliff'.....by the Little ones
7. Violin duet 'Rondo' (Gurlitt).....Katherine Mah-ah-lee and Allie
8. Recitation—'Hiawatha's wooing' (Longfellow).....Senior class
9. Part song—'O wake ye woodland voices'.....Senior class
10. Recitation—'The mouse-trap'.....by the Little ones and Therese
11. Violin solo—'Melody' (Rubenstein).....by Katherine Mah-ah-lee
12. Fancy drill—The May-pole dance.....Senior girls
13. All Hallow's' patriotic song.....The school

God save the King.

In conclusion I may mention that the girls who are in service are doing very well, and we receive constant applications from ladies wishing to engage maids, especially as nurses, for their children from this school.

I have, &c.,

AMY, SISTER SUPERIOR, C.A.H.,

Principal.

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BRITISH COLUMBIA,

ALERT BAY INDUSTRIAL SCHOOL,

ALERT BAY, June 30, 1906.

FRANK PEDLEY, Esq.,

Deputy Supt. General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my annual report of the Alert Bay industrial school for the year ended June 30, 1906.

Location.—The school is healthily situated on the Alert Bay industrial school reserve, and is erected on rising ground at the west end of Alert bay; commands a pleasant view to sea and is sheltered from northerly winds. The post office address is Alert Bay, British Columbia.

Land.—There are 410 acres of land connected with the school. The soil is mostly gravel and is thickly covered with bush. It is best adapted for pasture-land, but is only cleared with difficulty. Potatoes do well for the first and second years.

Buildings.—The school building is of wood, strongly and tastefully erected with plastered walls and light, airy rooms. Size, 60 x 40 feet. Attached to the main building is a wing, 54 x 18 feet, comprising class-room and workshop. The outer buildings comprise trades instructor's house, laundry, cow-shed, hen-house, root-house, cloak-room, tank-house, wood-shed and tool-house.

Accommodation.—There is ample room for 35 boys and 3 officers.

Attendance.—The average attendance was 33, showing a marked improvement upon last year.

Class-room Work.—The work done in the class-room has been very encouraging and praiseworthy. In no previous year have the pupils taken such a keen interest in their lessons, and great progress has been made. They have been taught by the principal and George Martin Luther, who, the department will remember, was educated in this school, and is developing into an excellent teacher. The pupils were graded as follows:—

	Pupils.
Standard I.	1
" II.	1
" III.	15
" IV.	6
" V.	2
" VI.	8

Industries Taught.—All the smaller boys have had definite and systematic training in the general housework of the institution. The older boys have had regular instruction in the carpenter's shop under Mr. R. Willard, who has also given them lessons in boat-building; some of the senior pupils have shown a special aptitude for this branch. The laundry work was done by the boys, under the able management of Miss L. Humphreys.

Farm and Garden.—The flower garden has been tended by the matron and small boys and has produced good results. The vegetable garden has yielded enough fruit and vegetables to supply the school. A good crop of potatoes was raised.

Moral and Religious Training.—The pupils are continually taught the necessity and advantage of purity of mind and body. The life of Jesus Christ is daily put before them as the only true pattern. This is done by daily prayer and Bible lessons, as well as talks with individual boys on every suitable occasion by the principal and his staff. The pupils attend divine service morning and evening on Sunday, and Sunday school

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in the afternoon. The boys form the choir for the village church, and have taken a keen interest in it. The practice incurred has been of mutual benefit to present and past pupils.

Health and Sanitation.—The general health of the boys this year has been good. An epidemic of whooping-cough, followed by mumps, caused great anxiety. Great care was taken and no serious results ensued. The sanitary arrangements are quite satisfactory. A wooden drain carries the water from the kitchen, bath-room and wash-house to the sea. Cleanliness is strictly enforced and disinfectants used freely. Ventilation is carefully attended to.

Water Supply.—The water is supplied to the house from a well near. It is pumped up by the pupils into a large tank, which is always kept clean. The water is pure.

Fire Protection.—Four chemical fire-extinguishers, two fireman's axes and fourteen buckets are kept in places of convenient access.

Heating and Lighting.—The school is heated by means of ordinary box-stoves. The kitchen range is still in good repair. It has done excellent service. Coal-oil lamps are all hung from the ceiling.

Recreation.—The secret of success with boys is to give them plenty of fun when they are not employed with work or lessons. Football has still retained its place as the most popular sport, and they have played with vigour the year round. They now play a scientific game. Two matches were arranged, one with the sailors of H. M. S. *Egeria*, and one with the Zawatinukioy, in both of which the boys were victorious. The boys have played croquet and lacrosse, and running and jumping have been practised.

The brass band, under Percy Barton, has been a great pleasure to both boys and visitors. A supply of suitable indoor games is kept for wet evenings for the smaller boys. Miss Humphreys has taken great pains to teach them kindergarten games and songs, which they have much enjoyed.

General Remarks.—My chief remark to the department must be that with each year I see a marked improvement in the spirit in which the boys accept the education offered them, and I notice their painstaking application of everything taught. It has been a great pleasure to teach them. Several boys have learned photography. We enjoyed Mr. Green's visit in the winter.

I have, &c.,

A. W. CORKER,

Principal.

BRITISH COLUMBIA,

CLAYOQUOT (CHRISTIE) INDUSTRIAL SCHOOL,

KAKAWIS, CLAYOQUOT SOUND, VANCOUVER ISLAND, June 30, 1906.

FRANK PEDLEY, Esq.,

Deputy Supt. General of Indian Affairs,
Ottawa.

SIR.—I have the honour to submit my annual report for the year ended June 30, 1906.

Location.—The Clayoquot (Christie) industrial school is situated on a cozy cove of Deception channel, in Clayoquot sound, on the west coast of Vancouver island. The location is an ideal one, being central on the coast, secluded from the nearest Indian reserve, Opitsat, and the Clayoquot settlement, and well sheltered from cold winds. Mail reaches the school by private mail bag direct from the Victoria post office.

Land.—The school owns 175 acres of land, the same having been pre-empted by the Roman Catholic archbishop of Vancouver island. The land is heavily covered with worthless timber and dense underbrush and offers great difficulties to cultivation, but no material advantages to the institution, beyond the small amount of garden produce, at present.

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Buildings.—The school building, a substantial frame structure, two and a half stories high, has a frontage of 144 feet and a depth of 52 feet. The basements are divided up into gymnasiums, furnace-room, paint-shop and cellars. On the first floor are officers', boys' and girls' entrance halls, parlour, office, heating room, kitchen, pantries, store-room, pupils' and officers' dining-rooms, Sisters' room, senior and junior class-rooms, separate boys' and girls' recreation-rooms, two sewing-rooms, and two toilet-rooms. The second floor contains the girls' dormitory, with toilet and lavatory adjoining, two infirmaries for boys and girls, separately, with bath-rooms attached, principal's room, eight bed-rooms, and chapel and vestry. On the third floor in the attic are the boys' dormitory and toilet-room, and two clothes-rooms.

In the rear of the main building stands the laundry, 14 x 32 feet, and back of it is the wood-shed, 36 x 50 feet, with carpenter-shop and shoe-shop under the roof. The storehouse, 12 x 18 feet, is a little distance away from the main building. There is also a small temporary barn on the premises. The industrial instructor and family live in a small cottage, 24 x 30 feet, which contains two bed-rooms, kitchen and sitting-room and has a wood-shed adjoining.

Since my last report concrete walls have been built under the old, now the centre, portion of the main building, and the ground excavated for furnace-room and cellars. The whole building rests now on concrete walls. In the basements of the two new additions, erected the previous year, concrete floors were laid. A massive chimney of brick has been built, which is exclusively used in connection with the furnace. The kitchen chimney has been extended down to the ground, concrete being used for the purpose.

During this year the management had all the plumbing work done. Four bath-rooms were fitted up, each with tub, closet and lavatory; each of the boys' and girls' wash-rooms was provided with eight sectional basins of the most approved sanitary pattern; altogether thirteen closets were put in. Two pantries were fitted with white enamelled sinks. All the fixtures are the standard A quality.

Accommodation.—The institution has accommodation for 75 pupils and a staff of 8.

Attendance.—The average attendance for the year was 60, 27 boys and 33 girls; the highest attendance was 68, the lowest 58; 5 boys and 6 girls have been discharged, and 1 boy died; 2 boys and 3 girls have been admitted. The present enrolment is 60, 27 boys and 33 girls; 10 above the number allowed by grant.

Class-room Work.—This is carried on according to the programme prescribed by the department, and the progress of all the pupils, without exception, has been very good, particularly in reading, arithmetic, composition, and writing. Our pupils' reputation for good writing has gone beyond the boundary line: at the special request of Prof. A. N. Palmer, of Cedar Rapids, the originator of the Palmer system of writing, our senior pupils wrote some six hundred letters, which were examined by several thousand public school teachers of New York city, 'who,' quoting from the letter of Prof. Palmer, 'have said if they could do as well as the Indian pupils of the Christie school, they would be satisfied.' Three pupils received the certificate of excellency from Prof. Palmer.

School hours are from eight to twelve and from five to six. The pupils are divided into junior and senior departments and are taught in separate class-rooms.

Classification.—At the end of the term the pupils were graded as follows:—

	Boys.	Girls.	Total.
Standard I.	..	2	2
" II.	6	12	18
" III.	3	8	11
" IV.	11	6	17
" V.	2	1	3
" VI.	5	4	9
Total.	27	33	60

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Farm and Garden.—Farm there is none, nor fields nor pastures. All feed for our stock has to be imported. The garden is still in a rudimentary state. The climatic conditions of this wind-swept and rain-soaked coast tantalize the best efforts in gardening. Only a few vegetables rewarded our last year's work. Both junior and senior boys are instructed in gardening. About 2 acres have been planted and seeded again this year, and a half acre of new ground has been sown in grass.

Industries.—Baking.—Ten boys, in sets of two, prepared the dough daily, and 12 girls, likewise in turns, baked the bread in the kitchen range. The girls do all the small baking of bread and pastry.

Carpentering.—Ten boys received instruction in this trade last year and made good progress. With their instructor, Mr. J. J. Swain, they floored, ceiled and lined the senior class-room and the boys' large recreation-room, laid the floor in the new chapel and put on a panelled fancy ceiling. On the first floor in the old building two partitions were cut through and a new partition set for a hall which connects the new additions one with the other. The parlour received a new panelled wainscoting. Four bath-rooms were partitioned off; and four closet-stalls put up in each of the two toilet-rooms. This spring they made 600 feet of neat picket fences along the walk from the beach and around the gardens. Many repairs, too, had to be attended to by them. One medicine cupboard, one vestry cupboard, one school-room cupboard, and ten school desks are creditable specimens of the skill of the carpenter apprentices and their instructor.

Boat-building.—Mr. Swain with his apprentices replanked an old scow and caulked and pitched the seams; two old canoes were provided with oak ribs. The boys made all the oars and paddles needed.

Dairying.—Two boys were taught milking and feeding and care of stock.

Fishing.—As in former years the senior boys have again done themselves credit by supplying the institution liberally with cod, herring, halibut, perch, salmon and clams.

Laundrying.—The boys are taught to wash their own clothing, and they also do the heavier work of all the washing; the girls, however, receive minute instruction in all the details of laundrying.

Net-making.—Five boys were given instruction in this useful industry by the trades instructor.

Painting.—Four apprentices had ample opportunity during the year to acquire a practical knowledge of plain painting, staining and varnishing.

Plumbing.—Six boys assisted the plumber and the heating contractor as 'helps,' rendering valuable service, and learned threading and fitting of pipe, soldering and wipe-jointing. Two of them are sufficiently qualified to look after and keep in working order the many different fixtures all over the house.

Shoemaking.—There are four apprentices in the shoe-shop learning the trade under a competent foreman.

Girls' Industrial Work.—All the girls are trained and assigned tasks, according to ability and proficiency in the different departments of domestic work. An expert cook has a number of girls in constant training. Each girl has to pass through regular courses in plain sewing, hemming, darning, plain and fancy knitting, mending, sewing by machine, cutting, fitting and finishing dresses; in crocheting, lace-making, carpet-weaving and embroidery. A fair amount of custom work was done by the girls this year. All of the girls' and most of the boys' clothing was made at the school.

Moral and Religious Training.—No other feature of education receives more conscientious attention from teachers and officers of the institution than the moral and religious training of our pupils. The discipline is mild but firm. The pupils are under constant supervision, and their conduct is watched most carefully. Religious persuasion is the most effectual means of correction with these children; during the whole year I have had no occasion to apply corporal punishment to any of the pupils.

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Their conduct has been all that can be desired. Religious instruction is given daily.

Health and Sanitation.—Last year the coast was visited by whooping-cough, but through timely precautions only very few pupils fell victims to its attacks. They all speedily recovered but one, who was taken home by her people when on a fair way to recovery. The poor girl lacking the careful nursing of the good Sisters succumbed after a few days at home. I am sorry to report the death at the school of one boy from a complication of acute pleurisy and tuberculosis. Sewerage and sanitation are perfect.

Water Supply.—The school boasts of the finest water service on the west coast, thanks to the aid of the department rendered three years ago. The water is gathered at a head of 150 feet from a small but reliable mountain creek, into an 8,000 gallon tank, and thence conducted by a two-inch galvanized iron pipe for a distance of 3,500 feet to the school. It is pure spring water, as clear as crystal.

Fire Protection.—Ten chemical extinguishers, 12 fire-pails, 2 fireman's axes and 100 feet each of two-inch rubber-lined web hose and three-quarter-inch rubber hose are distributed at convenient places all over the buildings, and the pupils are drilled monthly in their use. Outside fire-escapes provide for safe exit in case of fire.

Heating and Lighting.—Since January we have the best heating system existing, a direct two-pipe open-tank hot-water system, which the management was enabled to install with the assistance of the department. Forty-six radiators of the Gurney Oxford pattern and two coils radiate a uniform comfortable sanitary warmth into every part and corner of the large building. A Great Northern Kewanee boiler of 2,400 square feet of direct radiation, burning wood 54 inches long, supplies the 1,944 feet of radiation required by the radiators with comparatively little fuel. Mr. John Colbert, of Victoria, being the lowest bidder, secured the contract, and furnished a first-class plant, which has been giving perfect satisfaction from the first day without a hitch, at the total cost, including all extras, of \$2,693.

Lighting is effected by the use of coal-oil lamps.

Recreation.—For all kinds of outdoor exercise and sport, the sandy beach offers the pupils a splendid playground. The boys enjoy football, handball, jumping, vaulting, foot-racing, marbles, boating and canoeing. The girls have swings, skipping ropes, croquet and tenpins. For the rainy season both boys and girls are provided with a varied selection of favourite indoor games. They also have drills and calisthenic exercises.

In closing this report I feel it my duty to express publicly to the department my warmest, sincerest thanks for the substantial grant allowed for the heating plant; also to Superintendent A. W. Vowell, to Inspector A. E. Green, and to our energetic agent, Mr. A. W. Neill, for their ever-ready co-operation in all matters pertaining and leading to the welfare of the institution.

I have, &c.,

P. MAURUS, O.S.B.

Principal.

BRITISH COLUMBIA,

COQUALEETZA INDUSTRIAL SCHOOL,

SARDIS, June 30, 1906.

FRANK PEDLEY, Esq.,

Deputy Supt. General of Indian Affairs,

Ottawa.

SIR.—I have the honour to submit my annual report for the year ended June 30, 1906.

Situation.—The Coqualeetza industrial school is on the south side of the Fraser river, and is about 4 miles from the steamboat landing. Boats ply daily between

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Chilliwaek Landing and New Westminster, a distance of 50 miles. By ferry connection is made with the Canadian Pacific railway at Harrison station. The school is 3 miles from the thriving town of Chilliwaek. It is not located on a reserve.

Land.—In connection with the school, there are 90 acres of excellent land. The farm comprises parts of lots 38 and 297, group 2, in the district of New Westminster, and is within the municipality of Chilliwaek. The land is all cleared and under cultivation. A beautiful stream of spring water runs through it, making it an ideal farm for dairy purposes. The missionary of the Methodist Church owns the property.

Buildings.—These are (1) the main building, containing kitchen, dining-rooms, dormitories, lavatories, laundry, recreation-rooms, clothes-rooms, furnace-rooms, gas tank-room, and dairy; (2) the primary school building where the boys of the band also practise; (3) the residence of the farm instructor; (4) a long frame building which includes a shoe and carpenter-shop, a wood-shed, a root-cellar, a drying-room, and a store-room; (5) three large barns; (6) a granary; (7) a wagon and implement-shed; (8) a bake-house; (9) a hen-house; (10) a water tank-house; (11) a root-cellar; (12) a beautiful and commodious residence for the principal has been completed this year, the dimensions of which are 47 x 31 x 22 feet.

Accommodation.—The main building will accommodate 100 pupils and a staff of 8 or 10 teachers.

Attendance.—Ninety-eight pupils have been in attendance during the year. The average attendance has been a fraction over 75. Twelve pupils have been admitted and 25 have been discharged, leaving 73 pupils on the roll.

Class-room Work.—The hours of study in the school-room are from 9 a.m. to 12 noon, and from 1 p.m. to 4 p.m. Each pupil is in the school-room one-half of each day, attending in the forenoon one month and in the afternoon the next. The progress of the pupils during the year has been very satisfactory. One of our pupils has been in the high school all the year with the object of preparing herself for a teacher. She hopes to secure a position where she may help her own people as mission teacher. The hope of the Indian is the development of his physical, intellectual, and spiritual powers under the care of a loving, sympathetic and Christian teacher. At the end of the year the pupils were graded as follows:—

Standard I.	19
“ II.	15
“ III.	30
“ IV.	15
“ V.	10
“ VI.	9

Ten of the girls are receiving music lessons regularly and have attained such efficiency that they are able to preside at the organ for our religious services. A reading-room has been opened for the boys. On the tables are found a good number of papers and magazines, both secular and religious. In this way our pupils are acquiring a love for reading, a taste is being developed for good wholesome reading matter. A kind friend sent us a small organ from Toronto for the boys' reading-room.

Farm and Garden.—The crops of the farm are looking well. All the trees of the orchard were pruned and whitewashed in the early spring and present a good appearance. A thousand evergreen blackberry canes were set out this spring, and next year there will be abundance of this very wholesome fruit for the pupils. This year we have about 40 acres of grain, 20 acres of hay, 12 acres of pasture, and 12 acres of potatoes, roots, beans, onions, and other garden stuff. We have 13 cows, 5 heifers, 3 calves, 1 Jersey bull, 6 horses, 16 hens, and a number of pigs. The farm is capable of producing large quantities of produce.

Industries Taught.—The pupils are taught all kinds of work about the house. Both boys and girls are taught to cook under an experienced teacher, and many of them make splendid progress. Besides the experimental part, regular lessons are given in

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domestic science, thus combining the theory and practice of cooking. As the girls get older they are placed in the sewing-room, where they are taught to mend and to make. The girls are, also, taught to make butter. The girls who go into service give marked satisfaction, and are much sought after. If we could get the consent of the parents all our girls could be placed in good Christian homes, and earn good wages. The boys are taught to care for horses, cows, and pigs, in fact to do all kinds of farm work. Five of them have received instruction in woodwork and are fairly good carpenters. A number of the boys are efficient bakers. The bread they turn out is first-class. They could demand good wages in any of our cities as bakers of bread. We have an arrangement with the village blacksmith so that any of the boys who desire to learn this trade may do so. However, this has not been a great success. A boy should be at least seventeen before he is placed in a blacksmith-shop. When he is as old as that, the average Indian parent wants the pupil discharged to help him to fish. Then, only the strongest boys can stand blacksmithing. Running an industrial school is expensive. It takes a great many tools and implements. It is hard on horses. It calls for the very greatest skill, tact and patience to make a success of the work.

Moral and Religious Training.—The moral and spiritual welfare is strictly and conscientiously looked after. The moral atmosphere of our school is all that could be desired, and must tell for good on the lives of our boys and girls. This is the formative period of their lives, and impressions made now will be hard to efface. Just before breakfast each morning a hymn is sung, a scripture lesson is read, and all kneel in prayer. After supper the pupils repeat in unison passages of scripture which they have memorized, a hymn is sung and prayers are repeated. A regular prayer meeting is conducted every Thursday evening, at which all pupils and teachers attend. Sunday school is conducted each Sabbath morning; the International lessons are used. At 2 p.m. each Sabbath all the school, accompanied by some of the teachers, attend service in the Indian church on the reserve near the school; Sabbath evening a service, with an appropriate sermon, is held in the school-room. A number of the people in the community join us in this service. We keep before us constantly the development of a strong, manly, Christian character, and in many cases our labour is amply rewarded.

Health and Sanitation.—The health of the children on the whole has been good. Perhaps in no year in the history of the school has there been less sickness. However, a brother and a sister were carried off by the disease that is playing such havoc among the Indians, viz., consumption. The health of our pupils is carefully guarded. Believing as we do, that the physical is the basis of all development, the care of the body and the development of a strong physique is our constant care.

Water Supply.—The Luc-uc-uck, a beautiful stream, flows through the farm, affording an abundant supply of good water for the stock, and an inexhaustible supply for house use and fire-protection. During the year a water-wheel was placed in the stream to provide water to run the pump.

Fire Protection.—This is afforded by the following conditions: a brick building, hot-air furnace, with the main flues built of brick; the furnaces in the basement and the stoves in the laundry are on floors of cement; the baking is done in a detached house where there is a brick oven. The means at hand to extinguish fire consist of a good supply of water in the tanks available by taps on the different floors; water kept in barrels and buckets in the halls; a well, furnished with a force-pump; a supply of water-buckets and fireman's axes kept at easily accessible points; Carr and Patton chemical engines, and a fire company organized and drilled with a view to effectiveness. The building is provided with fire-escapes from the dormitories. In the plan of the building exit is made easy by halls and means of transport from one part of the building to another. Older pupils are appointed to the care of the different dormitories, whose duty it is to care for the smaller children in case of fire.

Heating and Lighting.—The building is heated by means of the Smead-Dowd system of hot-air furnaces, two of which we have in use. The building is lighted throughout by acetylene gas, which proves very satisfactory.

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Recreation.—Both boys and girls have games that they enter into with much zest. They are encouraged when the weather is fine to play. The boys never seem to tire of football, and our team is hard to beat. Just now they are competing for a cup. There are three teams in the competition, all local, and from present appearances our boys will be easy winners. Other games have their place. These are baseball, basketball and hide-and-go-seek. The band, too, affords entertainment for many an hour.

General Remarks.—The Rev. Joseph Hall, who had held the position of principal for nearly ten years, was compelled on account of illness to resign his position during the year. He worked hard and faithfully to advance the interests of the pupils under his care, and he experienced much joy and many triumphs in his work. This is a noble work, and in my opinion is the only successful way of educating the Indians. I find a large percentage of the Indian children apt to learn, and in almost every case where they are brought to school at a proper age they turn out well. Our industrial schools should aim to prepare the boys to assume the responsibilities of citizenship. Locate a colony of trained Indians, and for a time have some one to advise them. Some scheme could readily be worked out so as to develop a spirit of independence.

I have, &c.,

R. H. CAIRNS,

Principal.

BRITISH COLUMBIA,

KAMLOOPS INDUSTRIAL SCHOOL,

KAMLOOPS, July 1, 1906.

FRANK PEDLEY, Esq.,

Deputy Supt. General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my annual report for the year ended June 30, 1906.

Location.—The Kamloops industrial school is situated at the foot of St. Paul's mountain, on the northern bank of the South Thompson river. It is in the immediate vicinity of the Kamloops reserve, and about 2 miles from the town of Kamloops, which is a divisional point of the Canadian Pacific railway.

Land.—The area of land belonging to the school comprises 320 acres, surrendered by the Indians of the Kamloops reserve for the purposes of the industrial school. Under more favourable conditions of climate, about 40 acres could be cultivated; but, owing to the difficulty of obtaining water for irrigation, only 15 acres are laid out in fields, garden and orchard. The remainder consists of sandy hills and broken land suitable only for grazing, and of low-lying land which in the spring is transformed by the overflow of the river into a beautiful sheet of water. There is no natural grass to be cut for hay, nor is there any timber available for fuel.

Buildings.—The main building contains on the ground floor the parlour, office, dining-room for the boys, kitchen, pantry, and the laundry, with four bath-rooms and the bake-oven. The second story contains the chapel, the girls' class-room and a dormitory for the little girls. To the right is the girls' house, containing sewing and recreation-rooms, dining-rooms for the Sisters and girls, and dormitories. To the north, about 100 feet from the main building, is the boys' home, which contains store-rooms, recreation-room, lavatory and dormitory. There are also two rooms for the accommodation of the principal and the trade instructor. The boys' class-room is a separate building, 50 feet from the boys' home.

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The outbuildings consist of the carpenter and shoe-shops, two stables and barn, root-cellar, hen-house, ice-house, three-room cottage, at present unoccupied, girls' summer-house, and tank-tower.

Since my last report, the roofs of the principal buildings, the west side of the girls' house, the interior of the laundry, the hall and porch of the main building and the lattice fence of the flower garden have been re-painted; a part of the floor of the girls' recreation-room has been renovated. A large flight of stairs, giving exit from the boys' dormitory to the outside, has been built for a fire-escape.

Accommodation.—There is accommodation for 63 children and the necessary staff.

Attendance.—Sixty-three pupils have been in attendance during the year, and the average has been over 60. Two boys have been discharged; one regularly at the end of his term, and the other temporarily on account of scrofulous sores. Three boys and five girls have been admitted in the beginning of the year; many applications had to be refused. We have at present 28 boys and 32 girls.

Class-room Work.—The school hours for the boys are in the morning from a quarter to nine till twelve o'clock, every week-day, except Saturday; and in the afternoon of every week-day, from a quarter to five till a quarter past six. The school hours for the girls are from two to five in the afternoon, with half an hour's study in the evening. The pupils have made good and steady progress in the girls' department and in the lower grades of the boys' department, but I regret to state that the bigger boys have been at times remiss in their studies. I am pleased to say that the teachers are painstaking and efficient.

At the end of the year the pupils were graded as follows:—

	Pupils.
Standard I.	4
“ II.	5
“ III.	16
“ IV.	9
“ V.	15
“ VI.	11
Total.	60

Farm and Garden.—The produce of the garden for the past year was very good. The crops raised on about 3 acres were as follows: 19 tons of potatoes, 1,200 pounds of beans, about 5 tons of carrots, 1 ton of mangolds; and onions, table beets, parsnips and corn in sufficient quantity for the needs of the institution. Only the turnips were a complete failure. The garden is irrigated by means of a centrifugal pump and gasoline engine. The boys cleared last fall, from heavy underbrush and poplars, about 1 acre of land, which has been planted this spring; but as this field is not adjacent to the garden, it has been necessary to purchase another pump and engine to irrigate it. This outfit can be easily transported, and will be used also to irrigate the orchard, situate a few hundred yards to the north.

The fruit-trees are doing well. We have enlarged the orchard this spring, and planted 62 apple, plum, prune and pear trees.

It must be admitted that irrigation by means of gasoline engines is rather expensive, on account of the high cost of gasoline; but Kamloops being in the centre of the dry belt of British Columbia, we could not raise anything at all without irrigation, and experience has proved for the last two years that we cannot depend any longer on the Indian irrigation ditch which in former years supplied us with water.

The alfalfa crop was very light last year, and the rest of the hay crop, consisting of wheat and oats sown for fodder, was still worse, owing to excessive drought. It is confidently hoped that our hay-field will be more productive in the future, as the department has kindly responded to my application for assistance towards the erection of a large windmill, which will enable us to raise water for irrigation purposes.

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All the boys work in the fields and garden; they milk the cows and attend to the stable work in turn, outside of the regular work-hours, which are from 1 to 4 o'clock p.m. Our stock consists of 4 horses, 6 milch cows, 1 heifer, 1 bull and 5 calves. There are also about 50 fowls.

Industries Taught.—Carpentering.—Twelve boys received instruction in this trade during the past year. They built a large flight of stairs, and made all the necessary repairs on the buildings, wagons, implements and furniture.

Shoemaking.—Six boys were employed in the shoe-shop. Their work consisted in repairing shoes and harness.

Painting.—All the painting and staining was done by the boys.

Baking.—Nine boys were employed in turn in doing the heavier part of the work, and the rest was done by the girls.

Girls' Work.—The girls do the cooking and washing, and learn all the branches of housekeeping. Besides the help they give for the general baking, they are made to go through the whole process of making bread on a small scale in the kitchen stove-oven. They are taught hand and machine sewing, and also knitting, crocheting, mending and darning. They make all their dresses and all other articles of clothing for their own use, and also shirts, drawers, trousers, coats and socks for the boys. I am pleased to say that the girls are tidy and industrious; great credit is due to the Sisters of St. Ann, who have them in charge.

Moral and Religious Training.—The moral training of the children is carefully attended to by constant teaching and supervision. All our efforts tend to the training of their own will to the conscientious discharge of their duties to God and man. Correction duly administered is often more successful in building up moral character than long exhortation. We never fail to reprehend the wrong-doers; the usual mode of punishment is to make them do some extra work during recreation hours, or to place them under confinement. Corporal punishment would be resorted to only in extreme cases, which happen very seldom. The most efficacious means to promote the moral conduct of the children is to ground them well in the truths and practice of the Christian religion. With this end in view, religious instruction is given almost daily for half an hour. Morning and evening prayers are said in common. On Sunday the pupils assemble three times in the chapel, and besides, one hour is devoted to the learning of sacred hymns and to the explanation of the Gospel.

Health and Sanitation.—On the whole, the health of the pupils has been good; yet there was during this year more sickness than we could naturally expect from the healthy climate of Kamloops and the excellent sanitary condition of the school. Last fall the boys were visited with an epidemic of eczema; during the winter 5 children suffered from scrofulous lumps, which disappeared after a few days of treatment, except in the case of a little boy who was temporarily discharged on that account; 1 girl had an attack of inflammatory rheumatism. I regret to say that 1 boy died in February of hemoptysis, and 1 girl died in March of an internal disease which the medical officer ascribed to tuberculosis. At present there is only 1 little girl who is in delicate health.

The sanitary condition is very good. The underground drain which carries to the river the water from the kitchen, laundry and bath-rooms, was renewed last fall. Alterations have been made in the boys' building to establish a good system of drainage for the water from the wash-room and the urinal placed in the dormitory. Garbage and refuse matter are not allowed around the buildings; disinfectants are used in the laundry and closets. Ventilation is carefully attended to, and the pupils are often reminded of the importance of securing a constant supply of pure and fresh air. The system recommended for the schools in Ontario is followed in the boys' dormitory; the lower sash is raised, and the space left under it is filled by a piece of board; the fresh air gets in through the space left between the lower part of the upper sash and the upper part of the lower one. This arrangement is excellent to prevent dangerous draughts when the wind is blowing.

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Water Supply.—Good water is obtained from the river by means of a bull-dozer pump and gasoline engine. The tank in which it is kept is lined inside with galvanized iron and covered all around with saw-dust.

Fire Protection.—The fire-appliances on hand are as follows:—Three chemical extinguishers and two fireman's axes; three strong ladders permanently attached to the principal buildings, and a few smaller ones which can be used in case of necessity; about two dozen buckets; two tanks: one of a capacity of 1,800 gallons, with three taps, and the other of a capacity of 1,200 gallons, placed on a tower 30 feet high. These tanks can be filled in less than an hour's time by means of a bull-dozer pump, which is operated with a three horse-power gasoline engine. There are 100 feet of rubber hose, which can be attached to any of the three hydrants placed at convenient points, so that a stream of water may be directed to any part of the buildings.

Heating and Lighting.—Ordinary box-stoves are used for the purpose of heating, and all the fire-wood has to be purchased and brought down from Shuswap, distant 30 miles from Kamloops. Coal oil is the only means of lighting, but tallow candles are used when it is necessary to move the light from one room to another.

Recreation.—The pupils have half an hour of recreation in the morning, half an hour after dinner, and in the evening from half-past six till bed-time. On Sundays and holidays, they enjoy a quiet walk or a drive in the wagons. They indulge in the ordinary amusements suitable to their age and sex. Some are fond of reading story-books, but they all seem never to tire of listening to the gramophone or the phonograph. One of the amusements of the boys is the brass band.

General Remarks.—We had, during the year, the honour and pleasure of two visits from the Indian superintendent; several other persons visited the school, and all expressed their satisfaction with the general appearance of the pupils.

In closing this report, I wish to express my high appreciation of the interest taken in our school by Superintendent Vowell, and to tender my sincere thanks to Mr. A. Irwin, our worthy agent, for his kindness and promptness in attending to all matters connected with the institution. We were very much pleased to welcome twice Mr. A. E. Green, the inspector sent by the department, and we are grateful to him for his kind words of encouragement.

I have, &c.,

ALPH. M. CARION, O.M.I.,

Principal.

BRITISH COLUMBIA,

KOOTENAY INDUSTRIAL SCHOOL,

ST. EUGENE P. O., June 30, 1906.

FRANK PEDLEY, Esq.,

Deputy Supt. General of Indian Affairs,

Ottawa.

SIR,—I have the honour to forward my annual report of the Kootenay industrial school for the year ended June 30, 1906.

Location.—The location of this school in the valley of the St. Mary's river is both pleasant and salubrious. The mountain breezes temper the heats of summer, and the surrounding, expansive and thickly wooded hills protect it from the many storms of winter experienced elsewhere. The mission is about 5 miles from the town of Cranbrook, our nearest railway station.

Land.—The area of land connected with the school is 20 acres. We have also rented 120 acres to afford the boys more opportunities of acquiring a thorough

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knowledge of farming, as this is the occupation to which most of them turn. The land is level and affords good pasturage. The soil is not very fertile, but with proper care and irrigation excellent crops can be raised.

Buildings.—These consist of three frame buildings. The middle house is occupied by the staff, and is partitioned off into parlour, office, chapel, dining-rooms, bed-rooms, kitchen and pantry. The girls' home is situated at the right of the main building and the boys' at the left. Both are the same size and are similarly arranged. They are divided into recreation and school-rooms, refectory, dormitory, wardrobes, bath and toilet-rooms. The outbuildings are laundry, bakery, storehouse, foreman's residence, carpenter-shop, barns, stables, hen-house, pig-pen and woodshed.

Accommodation.—The buildings are large enough to provide good accommodation for 65 children and the staff necessary to carry on the work.

Attendance.—The attendance, of course, has been regular, the children being all boarders. The average on roll is 50.

Class-room Work.—This is carried on by 3 teachers in separate rooms. The boys attend school from 8 to 11.15 in the morning, and the girls from 1 to 4 in the afternoon. The pupils have an hour's study in the evening. The progress of the children has been very satisfactory, and with the exception of a few they show a great desire for learning. The official programme of studies is closely adhered to, and examination divided into recreation and school-rooms, refectory, dormitory, wardrobes, bath and it is really a pleasure to teach them, they display such a talent for music. At the close of the term the pupils were classified as follows:—

	Pupils.
Standard I.	9
“ II.	9
“ III.	17
“ IV.	5
“ V.	9
“ VI.	1
	50

Farm and Garden.—Our garden is now in a flourishing condition. The fields are neatly fenced, and have strong, well-made gates that were put up by the boys under the supervision of the foreman. All the boys are taught farming, the younger ones doing the lighter work and working only half time. They evince a special aptitude for farming in all its branches; and as it is the most useful industry for them, they are given a thorough and practical knowledge of it.

We have very good success with our garden, which yields an abundant supply of vegetables, comprising cabbage, turnips, carrots, parsnips, beets, onions, lettuce, celery, pease, beans, cucumbers, tomatoes, pumpkins, corn and rhubarb. We had a very good crop of hay and oats, but our potato crop was not as good as usual. The orchard contains about 120 apple-trees and some plum-trees. As yet only the apple-trees are old enough to bear fruit; but these yield a prolific supply. We have also an abundance of small fruits, and have very good success with them.

Industries Taught.—The boys are taught farming, gardening, carpentry, and repairing of shoes and harness.

Girls' Industrial Work.—The girls are steadily acquiring a more thorough knowledge of needle-work, and are becoming more competent in the art of housekeeping. Under the surveillance of an able seamstress, they are first taught plain sewing, darning and knitting, then to cut, fit and make their own clothing. The girls take their turns at the kitchen, laundry, bakery and dairy under the direction of a Sister. Gardening is carried on by them, but on a small scale.

Moral and Religious Training.—We spare no pains to instil into the minds of the children the necessity of uprightness, and train them to a love of duty and a faith-

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ful discharge of their obligations to God and man; not through fear of punishment, but through a spirit of moral rectitude; so that when they leave school this religious training has become part and parcel of their existence. This is done by the principal himself and by the teachers. The conduct of the pupils during the past year was on the whole very satisfactory.

Health and Sanitation.—The health of the children has been very good, and no sickness of any moment has occurred amongst them. Sanitation and drainage are good.

Water Supply.—We obtain our water from Joseph's creek, a never-failing mountain stream. It is about 600 yards from the school, and the water is conveyed hither in pipes which are laid between 5 and 6 feet underground, which removes the danger of freezing. This system of water-works has thus far proved very satisfactory.

Fire Protection.—Each department is supplied with chemical fire-extinguishers, buckets, ladders and axes, and these are stationed at convenient places throughout the buildings.

Heating and Lighting.—Our houses are entirely heated by wood stoves. The lighting is done by means of coal-oil lamps.

Recreation.—A portion of each day is set apart for recreation. When the weather permits, the children amuse themselves with their numerous outdoor games in their respective playgrounds. The boys enjoy football, baseball and marbles; they are also very fond of skating, hockey, hunting, swimming and riding in season. The brass band still continues to be a source of much pleasure to them.

The girls amuse themselves with skipping, swinging, croquet and the like games. They while away the long winter evenings with music, singing, picture and story-books, magic-lantern and numerous other indoor games.

General Remarks.—Last October we were honoured with a visit from Mr. A. W. Vowell, our Indian superintendent, and Mr. A. E. Green, our inspector. On leaving, they expressed themselves as being pleased with the general condition and progress of the school. Mr. Green favoured us with another visit on the 18th and 19th of this month. He found the general condition of the school very good, and was pleased with the progress made by the children since his last visit. In conclusion, I wish to express my high appreciation and tender my sincere thanks to Mr. R. L. T. Galbraith for his kindness and promptitude in attending to all matters connected with the school.

I have, &c.,

N. COCCOLA,

Principal.

BRITISH COLUMBIA,

KUPER ISLAND INDUSTRIAL SCHOOL,

KUPER ISLAND P.O., June 30, 1906.

FRANK PEDLEY, Esq.,

Deputy Supt. General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my annual report for the year ended June 30, 1906.

Location.—This school is situated on the southwest side of Kuper island, about 5 miles from Chemainus station, on Vancouver island. The location is an ideal one for an industrial school, it affords privacy to its inmates, is guarded against the cold north winds by the evergreen forest, and enjoys a charming view of Stuart channel.

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Land.—In connection with the school an area of 70 acres was surrendered to the school by the Penelekut Indians, and forms part of the Kuper Island reserve. The soil is good and suitable for mixed farming.

Buildings.—All the buildings, which are twenty in number, are kept in good repair. The boys and the girls occupy separate buildings.

The main building contains, on the ground floor, parlour, office, boys' dining-room, kitchen, pantry and girls' dining-room. On the second floor are the girls' school-room, the music-hall, the chapel and two guests' rooms. The girls' home comprises, on the lower floor, sewing-room, infirmary for girls, store-room, recreation-room and parlour for matron; on the upper floor, girls' dormitories, linen and bath-rooms and bed-rooms for the female members of the staff. The boys' home is divided on the ground floor as follows: boys' infirmary, teachers' room, store-room, band-room, lavatory and bath-rooms, boys' play-hall and school-room. On the second floor, are linen-room, boys' dormitory and bed-rooms for the male members of the staff.

The outbuildings consist of a cottage for the foreman, a girls' gymnasium, with root-house underneath, laundry and dry-room, bakery, barns, hen-house, boat-houses, shops for carpenter and shoemaker, wood-sheds, house for hydraulic ram and elevated tank.

Since my last report the foreman and his apprentices built a new boys' gymnasium, 50 x 20 feet and 10 feet high, a new blacksmith-shop, 14 x 10 feet, and renewed the floor of the boys' play-hall.

Accommodation.—There is sufficient room at the school to accommodate 75 pupils and a staff of 8 officers.

Attendance.—During the year 68 pupils were inscribed on the roll. The average daily attendance was 65. Seven pupils were discharged with the consent of Superintendent Vowell, and one died of typhoid fever in the Chemainus general hospital. Ten new pupils were enrolled. During the last quarter 64 pupils, namely, 34 boys and 30 girls, were in attendance.

Class-room Work.—The school hours for the pupils were from 8.45 a.m. to 12 noon, in the afternoon from 5 to 5.45 p.m., with one hour study in the evening. The progress of the scholars was very gratifying.

At the end of the year the pupils were graded as follows:—

	Pupils.
Standard I.	9
“ II.	9
“ III.	16
“ IV.	15
“ V.	10
“ VI.	5

Farm and Garden.—Nearly all the male pupils take lessons in gardening; the juniors are entrusted with the flower and vegetable gardens, whilst the seniors attend to the heavier work on the farm. This summer our crops have a very promising appearance.

Our live stock consists of 1 span of horses, 8 milch cows, 1 bull, 1 bullock, 2 heifers, 3 calves, 2 sows, 13 sucking pigs and about 100 fowls.

Boys' Industrial Work.—*Carpentry*.—Mr. E. Schnee, our carpenter, assisted by four apprentices, built, during the year, a new gymnasium for the boys, a blacksmith-shop, laid a new floor in the boys' play-hall, renailed the shingles on the old buildings, and made a considerable amount of new furniture besides attending to all repairs.

Shoemaking.—Mr. H. Borde is our new instructor; Mr. J. M. Read having resigned. Six boys are learning this trade; they take a deep interest in their work, and have supplied all the pupils with new shoes.

Painting.—Three boys have done all the painting and four boys attended to the whitewashing.

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Baking.—This branch of industry is under the supervision of two boys, who are assisted in preparing the dough by five others.

Dairying.—Two boys have charge of this department. They operate the cream separator, do the churning and make very good butter. The milking is done by six boys.

Laundrying.—This work is accomplished by boys and girls under the superintendence of the matron.

Girls' Industrial Work.—The girls made most commendable progress in all kinds of housework, hand and machine-sewing, cutting and finishing dresses. Their crochet and fancy-work, of which there is quite a variety, was greatly admired by the many visitors who called at the school, and I am pleased to state that their efforts were amply rewarded by obtaining the first prize for general school work at the Dominion Exhibition held last October at New Westminster.

Moral and Religious Training.—Religious instruction is daily given to the pupils during half an hour; their morning and evening prayers are said in common, and on Sundays all attend divine service at the village church. The conduct of nearly all the pupils was very praiseworthy.

Health and Sanitation.—During the year two pupils suffered from erysipelas, an epidemic of measles visited the school and prostrated about 30 of our scholars; a few children were also afflicted with scrofula; 1 had to be sent home on account of repeated attacks of inflammatory rheumatism; our smallest boy, Amos Johnson, caught typhoid fever and, I am sorry to say, died on January 27, in the Chemainus general hospital. The sanitary condition of the school is good, the sewerage is excellent and the buildings are properly ventilated.

Water Supply.—A stream flowing between the two main buildings supplies the institution with an abundance of water. By means of a hydraulic ram the water is forced into a large reservoir, from which it is conveyed through the buildings. Thanks to the aid of the department, our water system is now being improved by laying galvanized iron pipes to some natural springs, where fresh and uncontaminated drinking water can be procured.

Fire Protection.—The pupils are regularly trained in the handling of ladders and fire-buckets, as well as in the operating of nine Star chemical fire-extinguishers. We have permanent fire ladders on the roofs and small hydrants inside and outside the buildings.

Heating and Lighting.—The heating of the institution is done by ordinary box-stoves. The lighting is supplied from an acetylene plant installed last year. The light is very bright, and the plant gives entire satisfaction.

Recreation.—Baseball, football, hockey, fishing, boating, swimming and marble playing are the principal outdoor amusements of the boys during the summer, whilst coasting, gymnastics, checkers and chess are the leading games in the winter. The girls in their own playground and gymnasium amuse themselves by swinging, skipping and playing ball. Our brass band is now under the leadership of Foreman Selnee, and continues to prove a great attraction and delight to every pupil.

General Remarks.—In closing, I beg to tender my sincere thanks to the department for the liberal assistance given me for our water-works.

I have, &c.,

G. DONCKELE,

Principal.

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BRITISH COLUMBIA,
LYTTON (ST. GEORGE'S) INDUSTRIAL SCHOOL,
LYTTON, June 30, 1906.

FRANK PEDLEY, Esq.,
Deputy Supt. General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit the annual report of the above named industrial school for the fiscal year ended June 30, 1906.

Location.—The school is situated $2\frac{1}{2}$ miles from Lytton, which is on the main line of the Canadian Pacific railway, and lies to the east of the Fraser river, about half a mile back, the building being close to the Lytton-Lillooet road.

Land.—We have about 600 acres of land, lots 11 and 12, and 47, group 1, Yale district, and have applied for the balance to the Dominion government. On one claim to the north of lots 11 and 12, we have built a large barn, and have fenced in 24 acres, which is slashed, the brush being piled in wind-rows ready for burning.

The soil is sand, sandy loam and clay, and most of the older portions of the farm are under cultivation now, with meadows, grain, orchards and garden.

All the land is owned by the New England Company.

Buildings.—The school building is in good repair, but we are making some alterations and improvements this summer.

The buildings are as follows: school building, with class-rooms, dining-room, cloak-room, kitchen, pantries, dormitories, clothing cupboards and store-rooms, carpenter-shop and shoe-shop, laundry, and private part for principal, matron and teacher.

Other buildings are three barns, horse-stable, cattle-sheds, dairy, granary, implement-sheds and poultry-house, blacksmith-shop and farmhouse.

We have added a large implement-shed this year, and have foundation of a laundry laid, and gravel on the ground for concrete walls of a root and apple house.

The carpenter and farm-help each have a log house.

The dimensions of the implement-shed and laundry are about the same, 40 x 24 x 9 feet, and the root-house will be 16 x 18 x 7 feet.

Accommodation.—There is accommodation for 40 boys and a staff of 4.

Attendance.—We have at present 29 boys, 1 being absent on account of scrofulous sores. Thirty-five have been admitted and 5 discharged.

Class-room Work.—The school hours are from 9 to 12 and from 7.30 to 8.30. The subjects taught are reading, writing, arithmetic, singing, grammar, history and geography.

Farm and Garden.—The farm is in good order, and the garden promises a good supply of melons and tomatoes, and the fruits are plentiful, clean and free from disease. We have already got in one crop of alfalfa and red clover and early hay, about 10 tons.

The stock—6 horses, 50 sheep, 39 cattle and 12 pigs—is all in good condition.

Industries Taught.—Farming, blacksmithing, gardening, fruit-growing and carpentry are our chief industries.

Moral and Religious Training.—Careful watch is kept over the boys to train them in honesty, truthfulness and uprightness, and instruction given to this end, and this, with daily services of Bible reading, and hymns and prayers and Church of England services on Sundays with instruction in church catechism, makes up our full endeavours in these matters.

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Health and Sanitation.—The health of the boys has been good, and we have had no trouble from surroundings from a sanitary aspect. We have plenty of good water, fresh air, pure milk, and a sufficient supply of meats and vegetables and fruits.

Water Supply.—This is from a large tank built in a creek close to the school, which is 23 x 12 x 7 feet, and is placed 125 feet above the base of the school building. In winter the tank is supplied by a spring, in summer by Botanic creek.

Fire Protection.—An inch and a half pipe, perforated every 6 inches, runs round the peaks of the roof; two fire-escapes are built, one at the south, the other at the north of the school building, and these, together with hose, axes, and buckets, make the total.

Heating and Lighting.—The heating is by hot air from two furnaces in the basement, and the lighting with coal oil, angle lamps.

Recreation.—We get plenty of outdoor exercises and sports, the absence of rain giving time and opportunity for these, and we are seldom kept indoors by bad weather, and an open country affords a fine chance for fishing and shooting and roaming. We manage to get three hours a day for play, and a half holiday on Saturdays.

I have, &c.,

GEO. DITCHAM,

Principal.

BRITISH COLUMBIA,

METLAKATLA INDUSTRIAL SCHOOL,

METLAKATLA, June 30, 1906.

FRANK PEDLEY, Esq.,

Deputy Supt. General of Indian Affairs,
Ottawa.

SIR,—I have the honour, in compliance with a departmental circular, to submit this report for the year ended June 30, 1906.

Location.—This school is situated in the village of Metlakatla, on a southern slope of the west side of the Tsimpsean peninsula.

The location is much admired for the fine, extensive view which it gives on one side of hills and mountains, and on the other of a sea and inlets nearly inclosed by islands covered with evergreen trees.

Land.—When the school was first begun, 6 acres of land were surrendered for its use by the Indians of this band, and since then they have also given the site of the buildings occupied by the girls, and some small pieces in extension of playgrounds and gardens, aggregating a little more than half an acre.

Buildings.—These are as follows: the main building of the boys' division, a two-story frame structure, which has a frontage of 90 feet by 60 feet deep: containing on the lower floor, a parlour, office, two dining-rooms, infirmary, sewing-room, kitchen and store-rooms; and on the upper floor, the principal's bed-room and eight small dormitories.

The girls occupy a substantial frame building, nicely finished with plaster inside. It has a frontage of 64 feet by 22 feet deep, and two wings 20 feet wide, extending back 40 feet. The rooms on the first floor are: reception, class, dining and cloak-rooms, pantry, lavatory, kitchen and store-rooms. On the second floor are the matron's, the assistants' and teacher's rooms, two large dormitories, a room used as a hospital and one for clothing. Above there is a half-story with unfinished attics. In the basement there is a large room.

The laundry is an annex. The other buildings are, a comfortable school-house, in which the boys are taught; another divided into carpenter and shoemaker's shops, laundry and store-rooms; also a coal-house, stable, and a fowl-house.

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Accommodation.—For the pupils of the boys' division the accommodation is rather limited, particularly in the dormitories. In the girls' branch it is quite sufficient.

Attendance.—Except during the fishing season, when all the elder boys went out to assist their parents, and a few of the girls went home, the average attendance was about 58.

Class-room Work.—The boys and girls were taught in separate buildings, the boys by the principal and the girls by Miss Jackson. Pupils newly admitted, and those much behind in the subjects of study, attended both forenoon and afternoon, with the younger pupils, the instruction being given in the class-room. The progress made is satisfactory.

The grading according to the schedule of the studies prescribed by the department was as follows:—

	Boys.	Girls.	Total.
Standard I.	1	1	2
" II.	10	6	16
" III.	4	6	10
" IV.	4	7	11
" V.	9	5	14
" VI.	3	3	6
Total.	31	28	59

Industries Taught.—Twelve boys received instruction in carpentry from Mr. John Boyd, who served his apprenticeship to the trade in England.

Mr. H. Clifton, a former trade instructor in this institution, also taught them for a short time afterwards.

They erected a platform, 96 x 5 x 6 feet, and railing. They kept building and furniture in repair, made two wardrobes, erected a fence, painted rooms, platform and fence, and repaired and refitted the village hospital.

Three of the boys did the shoe-mending. All are taught gardening.

Girls' Industrial Work.—All the girls took part in the general housework, even the smallest had her share, that she might learn by degrees to make herself useful. The elder ones learned cooking, laundry work and dressmaking. All were taught to assist in making and mending their own clothing, and the house linen. Many of them can make their own dresses.

Garden.—Our gardens are small, but they are kept in good condition, and the returns from nearly everything that was sown or planted, were satisfactory. Fruit-trees were the exception. I had cherry-trees dug up because they yielded nothing but leaves.

Moral and Religious Training.—We have prayers morning and evening—in the evening in the village, conducted by the Right Rev. Bishop Du Vernet. In the class-room three-quarters of an hour are given to devotional exercises and religious teaching, and all the pupils attend the church services and Sunday school in the village.

Health and Sanitation.—I regret having to state that the mortality was higher than in any year before. One boy and two girls died in the school. Another rather delicate boy went out with his relatives to the salmon-fishing on the Skeena river, had an attack of influenza, then prevalent, and died there. A girl sent to the Port Simpson hospital, and another to her home, died also. The health of the rest of the children, except a few who had whooping-cough during the prevalence of that epidemic about the end of autumn and beginning of winter, was otherwise good.

The buildings are well ventilated, and the drainage in fair condition.

Water Supply.—The rain which falls on the buildings is conveyed into tanks having a capacity, I estimate, of between 11,000 and 12,000 gallons. The tanks are cleaned out frequently, and the water is generally clear and good, but during long-continued frost, or a dry summer, it becomes rather impure; but the chances of getting

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a fresh supply have to be considered before running it out of the tanks. The best, however, is done that can well be done to keep it as pure as possible.

Fire Protection.—About two years ago the buildings occupied by the pupils were covered with metal shingles, and that is our best protection against fire. Since then we have not been disturbed by fire alarms; however, we fully recognize that it is always well to be prepared for emergencies, and therefore have our appliances for extinguishing a fire in readiness for immediate use.

The chimneys are made of terra cotta pipes, and are frequently swept.

A fire-escape and two stairways lead from each of the girls' dormitories.

The boys' dormitories can be easily emptied by three stairways.

Heating and Lighting.—All the heating is with coal and wood, used in common stoves. The boys' sleeping apartments are not heated. Light is supplied by coal-oil lamps.

Recreation.—The boys play football and baseball. They are also fond of archery, boating and swimming. Indoors, their favourite pastimes are playing checkers, halma and crokinole; also reading and singing.

The girls exercise themselves swinging and ball-playing. On rainy days they amuse themselves with round games, singing and fancy-work.

The little ones are fond of their dolls, and some of the older ones like to read their story-books. Those remaining at the school spent their holidays camping out. During a part of the winter two and a quarter hours were given each week to physical culture.

General Remarks.—Miss R. M. Davies, after managing very efficiently the girls' branch of the school for over four years, and without any salary, resigned and left about the beginning of August last, to aid in carrying on the 'White Home,' a boarding school established for the benefit of white and half-breed children. Her assistant, Miss E. Collison, after three years' faithful service, also left about the end of March. She was very much liked in the school. Miss M. F. Forbes, who had experience teaching a ladies' school in Halifax, is now, with two assistants, Miss Audrey De Blois and Miss Alice Moors, recently appointed, in charge of the girls.

The children attend the Sunday school in the village, and I wish thus publicly to thank the ladies by whom it was carried on for their kind instruction of our pupils.

Some of the Metlakatla young men who have been in this school are employed by the Grand Trunk Pacific railway at Kaien island. Through the influx of white people seeking sources of industry and investments for capital other fields of employment will soon be opened up. Two or three days ago an ex-pupil from Massett, Queen Charlotte islands, informed me that he got good wages from timber cruisers and others, and, although he had been for some time very unwell, he had within twelve months earned about \$400.

Mr. Green inspected the school in August, and again in February.

The Right Reverend Bishop Du Vernet takes a great interest in the welfare of the children.

I have, &c.,

JNO. R. SCOTT,

Principal.

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BRITISH COLUMBIA,
WILLIAMS LAKE INDUSTRIAL SCHOOL,
150-MILE HOUSE P. O., July 3, 1906.

FRANK PEDLEY, Esq.,
Deputy Supt. General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my annual report for the year ended June 30, 1906.

Location.—This institution is beautifully situated in a fertile valley along the San José creek, 135 miles from Ashcroft, a station on the Canadian Pacific railway, and 4 miles from Sugar Cane, the nearest Indian reserve.

Land.—All the land in connection with the school is the property of the corporation of the Oblates of Mary Immaculate. It is, for the greater part, only pasture-land.

Buildings.—These consist of the main building, the boys' and the girls' homes, and a fourth building containing kitchen and dining-rooms. The main building is mostly occupied by the reverend principal and the other fathers. The boys' home comprises, on the lower floor: school-room, bed-room, parlour, play-room and lavatory; on the second floor: dormitory, store-room, sick-room, bed-room for the foreman; in the attic are located the boys' wardrobes.

The girls' home has, on the lower floor: a school-room, a store-room, two parlours, a sewing and a play-room; the upper floor contains a dormitory, a bed-room, chapel, bed-rooms for the staff and a second dormitory; in the attic are the girls' wardrobes and another store-room.

The outbuildings are: meat-house, granary, harness, carpenter and blacksmith-shops, three cellars, hen-house, stable, barn and machine-shed. All these buildings are in good repair; in the kitchen only a new floor was laid.

Accommodation.—The school can easily accommodate 90 pupils, with the necessary staff.

Attendance.—At the end of the year 58 pupils were in attendance; 23 boys and 35 girls. Three boys were discharged; 7 boys and 11 girls were admitted.

Class-room Work.—The school hours for the boys were, in the morning, from 8.15 to 10 a.m. every week-day, and in the afternoon from 4 to 5.15 p.m. every week-day except Saturday. The school hours for the girls were, in the morning, from 10 to 11.45 a.m. every week-day except Monday, and in the afternoon from 4.15 to 6 p.m., except Monday. The examinations held periodically showed good and steady progress, particularly in the boys' department. At the end of the year the pupils were graded as follows:—

	Pupils.
Standard I.	26
“ II.	9
“ III.	15
“ IV.	8

Farm and Garden.—Our large farm is one of the best in the country. All the crops did well; wheat especially yielded plentifully, while the year before it was all frozen. In the garden we raised an abundant supply of vegetables, such as cabbage, turnips, carrots, beets, onions, lettuce, pease, beans, celery, radish, &c.

Industries Taught.—Farming being in this part of the province the most useful occupation, we try to give our boys a thorough and practical knowledge of this branch. Three to 6 boys attended regularly to the garden, while all were only occasionally em-

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ployed there. During winter they sawed and split all the fire-wood, which is no small item; in the busiest times everybody works in the field.

Carpentering.—Since March 4 boys have been constantly employed in the carpenter-shop, under a very able instructor, Mr. C. M. Beget.

Blacksmithing.—The carpenter and his apprentices work also in the blacksmith-shop when required.

Shoemaking.—In the absence of a competent instructor, work in the shoe-shop was limited to half-soleing and mending.

Dairying.—During winter 4 boys milked 8 cows, while during summer 20 cows more or less are milked by 8 boys; 6 work the cream-separator morning and evening, and also attend to the churning.

The girls attain great proficiency in housekeeping, knitting, mending, hand and machine sewing, dress-making, crocheting, embroidery and lace-making. Except their underwear for winter, they made all their own clothing and the greater part of the boys' suits. Under the direction of a Sister, they in turn attend also to the laundrying, to the cooking, baking, and butter and cheese making. The aim ever kept in mind is to prepare each girl to become an all-round practical housekeeper.

Moral and Religious Training.—This being the most important part of education, particular care is taken by all members of the staff in training the children to be obedient, truthful, honest, kind and obliging. To the children's credit it must be said our efforts meet with splendid success. Religious instruction is given daily by the principal, morning and evening prayers are said in common, and on Sundays and holidays the children do all the singing in the church, often in two, three and four parts.

Health and Sanitation.—All the pupils enjoy excellent health, so much so that Mr. A. E. Green on his visit of inspection last May declared them the best-looking lot of children he met with. No disease, no epidemic, no death is to be recorded. The drainage is good, and cleanliness strictly enforced.

Water Supply.—The water-supply is still in an unsatisfactory condition, especially in winter, when lakes and creeks are frozen and the danger from fire is so great.

Fire Protection.—All fire-appliances are always kept ready at hand. Ladders are laid on all the roofs; the chimneys are made of terra cotta pipes boxed in about two inches of cement and frequently cleaned; there are also two glass-lined fire-extinguishers and a good supply of pails. But without an abundant supply of water well secured against frost, the danger from fire is still very great.

Heating and Lighting.—The lighting is by coal-oil lamps, and the heating by ordinary box stoves.

Recreation.—All sorts of outside games are heartily encouraged, for which the large and well-kept playgrounds offer the best opportunity.

General Remarks.—I am pleased to state that this has been in every respect a most successful year, thanks to the painstaking and zealous co-operation of the staff.

In conclusion, my sincere thanks are due to Superintendent A. W. Vowell, Inspector A. E. Green, and to our worthy agent, E. Bell.

I have, &c.,

H. BOENING,

Principal.

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BRITISH COLUMBIA INSPECTORATE,
1076 PENDER ST.,

VANCOUVER, July 9, 1906.

FRANK PEDLEY, Esq.,
Deputy Supt. General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my annual report on the inspection of the industrial, boarding and day schools of my inspectorate for the year ended June 30, 1906.

COQUALEETZA INDUSTRIAL INSTITUTE (METHODIST), FRASER RIVER AGENCY.

I inspected this school in July, 1905, December, 1905, and in June from the 18th to the 21st, 1906. There were 49 boys and 30 girls present in July and 80 enrolled, and in December 70 were present. The pupils did well in class-room work. Miss L. Peregrine teaches the primary department, and Miss F. M. Kinley the senior. Both are excellent teachers.

The crops raised on the 90 acres of land in 1905 were 100 tons of hay, 6 tons of pease, 21 tons of oats, 14 tons of mangolds, 23 tons of carrots, 3 tons of beets and 6½ tons of potatoes. The elder boys, with the farm instructor, did all the work, and did it well.

On March 1, the Rev. Joseph Hall, who had held the position of principal for ten years, was forced to resign on account of ill health. He was succeeded by Mr. R. H. Cairns, who holds a first-class teacher's certificate, and has had years of experience as a public school teacher in both Ontario and British Columbia. The staff at present is as follows: R. H. Cairns, principal; Arthur Pearson, farm instructor; George A. Horel, carpenter; Sarah Sprott, matron; Jeannette Bonnalie, assistant matron; Frances M. Kinley, school teacher; Louise Peregrine, school teacher; Frances E. Hudson, laundry teacher; Ella L. Toop, sewing teacher; Mary Hortop, cooking teacher; R. Marshall, band instructor. All the teachers except the band instructor have free board.

At the June inspection there were 85 pupils enrolled and 47 boys and 30 girls were present. They were classified as follows:—

	Pupils.
Standard I.	14
“ II.	15
“ III.	24
“ IV.	17
“ V.	7
“ VI.	8
Total.	85

I examined both senior and primary departments in reading, spelling, arithmetic, writing and drawing, and was satisfied that good and faithful work is being done. I was particularly pleased with the quick and accurate work of the primary department.

All the pupils over ten years of age attend school one-half of each day and work the other half.

There are at present 40 acres of grain, 20 acres of hay, 12 acres of pasture, and 12 acres of potatoes and roots growing, and all in excellent condition, with the promise

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of a large and abundant harvest. There were 1,000 blackberry canes set out during the past spring, and all the garden stuff is looking well. The larger boys work on the farm, and the smaller ones in the garden and among the fruit.

They have at present 13 cows, 5 heifers, 3 calves, 1 Jersey bull, 6 horses, and a number of pigs. They have also 16 fowls.

There were 8,054 pounds of milk sent to the creamery in the month of May, which produced 323 pounds of butter-fat. Besides this there were 1,610 pounds of milk used at the institute.

Five boys have become proficient carpenters, and two of them are looking forward to going to work as journeymen. The boys have full care of the cows, under the farm instructor. Some have become very good teamsters, and do very good work on the farm.

The girls are taught housekeeping in all its branches, and make all their own dresses, and do all the mending for the boys as well as for themselves.

There is an abundant supply of good water, which is pumped to the tanks by water-power, and pipes connect these with the building.

The septic tank, into which all sewage flows, has been cleaned out lately, and is in a satisfactory condition.

The fire-protection is good. They have plenty of water and a well drilled brigade. Iron ladders are placed from dormitory windows, and barrels of water are kept in the halls, with the fire-pails and axes.

The buildings are in fairly good repair, the school being a substantial one. The carpenter is now putting everything in first-class order. The principal's residence is now completed, the government having made a grant, and is a great addition to the school equipment, as it leaves additional room in the main buildings.

The barns and outbuildings are in good repair, and are sufficient to house all the stock. I inspected every part of the buildings, and found everything perfectly clean and in good order.

The work of the school is going ahead in a very satisfactory manner. The staff is working together in perfect harmony, and the whole aim is to equip the boys and girls under their charge for usefulness. I consider that the principal has an excellent staff, and I look for even increased success.

SECHELT BOARDING SCHOOL (ROMAN CATHOLIC), FRASER RIVER AGENCY.

This school was inspected in July, 1905, and on March 27 and 28, 1906. The staff is a good one, viz.: Sister Theresine, principal; Sister St. Ouen, matron and boys' teacher; Sister St. Denis, boys' teacher; Sister Victorien, girls' teacher; Sister Stephanus, girls' teacher; Sister Mary Colombe, seamstress; Sister Teresa, cook; Sister Amelia, cook.

There were 27 girls and 19 boys enrolled, of whom 23 girls and 18 boys were present. One boy was absent on sick leave, and 3 girls had died of whooping-cough. The pupils are graded as follows:—

	Pupils.
Standard I.	29
“ II.	12
Total.	41

The children were very good in reading, writing, spelling, arithmetic and geography. The drawing was also good, and they sang nicely. It is surprising the progress these children have made since the school was opened.

All the children have their own flower beds. The boys cleared the land for the garden, and were commencing to prepare the soil and plant the seeds. The boys, helped by the girls, got the ground ready and planted 78 fruit-trees and 12 shade-trees.

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They have 1 cow and about 50 fowls.

The large girls are taught all kinds of housework, including the baking of bread, cooking, sewing, laundry work, &c., and are beginning to do fancy-work.

During the winter there was a severe epidemic of whooping-cough in the village. Nine of the village children died and 3 girls in the school. The Sisters were up day and night caring for the sick. The children were nicely and suitably dressed, and their food was sufficient and good. The water comes from a lake 4 miles distant. The supply is very good, except for the three months of July, August and September. The water is led to a tank by a flume 3 miles long, which is dry in summer. The flume was made about 14 years ago. From the tank about a mile down to the building the water runs into iron pipes. Pipes should be laid all the way, and then the supply would be abundant for the whole year.

Drainage and ventilation are both very good. There is sufficient fire-fighting appliances, and if pipes were laid from the tank to the intake, there would be a splendid supply of water and great pressure.

These Indians were a little discouraged by the burning of their church on January 14. It was a very fine building, and built by the Indians. They had spent \$7,000 in cash and \$3,000 in labour in its erection, and the fire destroyed it in an hour. They feel the loss very much.

I cannot speak too highly of the principal and her excellent staff. I never saw Indian children make better progress than the children in this school have, from the time the school was opened.

LYTTON INDUSTRIAL SCHOOL FOR BOYS (CHURCH OF ENGLAND), KAMLOOPS-OKANAGAN AGENCY.

I inspected this school in August, 1905, at which time there were 25 pupils enrolled, and 22 present. They were graded as follows:—

	Pupils.
Standard I.	12
“ II.	13
Total.	25

Inspected again on March 21 and 22, 1906. There were 31 enrolled and 28 present, three being absent on sick leave. Miss Sarah Haynes, the matron, had resigned and the staff was as follows: Rev. George Ditcham, principal; J. M. J. Barker, teacher; Thos. E. Smith, carpenter; Miss Smith, matron; Sing, cook; Wo, laundryman.

The pupils were graded as follows:—

	Pupils.
Standard I.	7
“ II.	12
“ III.	12
Total.	31

Great progress has been made during the year in writing, spelling, reading, arithmetic, geography and composition. The course of studies prescribed by the department is followed, and the results are satisfactory. The class-rooms are supplied with all necessary material.

They have 800 acres of land, of which 140 acres are ploughed and splendidly irrigated. Crops are raised on the following scale: wheat, 13 acres; oats, 16; barley, 2; hay, 80; potatoes, 5, and corn 26 acres. Eight acres are devoted to the raising of vegetables, fruits, melons, &c.

The live stock consists of 35 cattle—Shorthorns and grades; 6 horses, 4 Clydes and 2 others; 19 pigs, Tamworth, West Yorkshires and Berkshires; 62 sheep, horned

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Dorset ram grades. In addition to these they have 28 chickens. There were 8 cows milking and they had made 150 pounds of butter.

The pupils work on the building, and repair and mend furniture when necessary, and are quite clever with the tools. Blacksmithing is casual, shoeing the horses and repairing the tools. They are taught all kinds of general housework. On the whole the health of the boys is good, and both food and clothing are of good quality and sufficient. The water-supply is good, both for domestic purposes and for fire-protection. The sewerage by sewer pipes and box-drains underground, is satisfactory. Ventilation, too, is good.

For protection against fire they have ridge pipe 1½ inches, perforated every 6 inches, hose attachments, fire-escape ladders, buckets and axes.

I inspected the buildings and found them all in good repair, everything was well kept and clean, and the outbuildings well constructed. The boys were busy working on an implement shed. I found the twenty-acre clearing all ploughed, and about 25 acres of a new piece slashed and piled, and fence posts in place for a sheep pasture.

Miss Smith, the new matron, took charge of her duties the first day of inspection. The principal and his wife are doing good work. The school is conducted by the New England Society.

KAMLOOPS INDUSTRIAL SCHOOL (ROMAN CATHOLIC) KAMLOOPS-OKANAGAN AGENCY.

Inspected in August, 1906. There were 62 pupils enrolled, of whom 59 were present. Inspected again in January, 1906. There were 30 boys and 33 girls enrolled, and all were present. This institution continues to do excellent work.

The staff consists of the following: Rev. Alph. M. Carion, principal; Mr. L. Viel, trades instructor; Sister M. Joachim, matron; Sister M. Paula, boys' teacher; Sister M. Lilisse, girls' teacher; Sister M. Ovide, cook.

The pupils who were recruited from the Kamloops-Okanagan agency were classified as follows:—

	Pupils.
Standard I.	9
“ II.	12
“ III.	14
“ IV.	15
“ V.	..
“ VI.	13
Total.	63

The children did well in reading, spelling, arithmetic, writing and geography. The girls especially were quick and accurate, and all were well-behaved. All school material was sufficient and in good order.

There are about 15 acres under cultivation, and the crops raised were 15 tons of alfalfa and of oats hay. There was a partial failure owing to drought. There is a very good garden in which were raised large quantities of beans, carrots, onions, potatoes, mangolds, beets and tomatoes. Cabbages were a failure. The orchard, too, was a partial failure, owing to drought.

The live stock consists of 4 horses, 4 milch cows with calves at foot; 2 other cows; 1 bull, two years old; 1 yearling heifer; 1 two-year old heifer had a calf lately which died. All the stock is in good condition and well housed. There are also 50 fowls.

The boys do the milking and the girls make butter. Twelve boys are under the carpenter's instruction.

They have built a large stair outside of the dormitory for fire-escape, altered the lavatory, made presses for clothing, and other articles of furniture. They also painted the roof, laundry, &c.

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Six boys mend all the shoes, harness, &c., the work-hours being from 1 to 4 p.m., and on Saturdays extra hours from 9 to 12 a.m.

The food and clothing were abundant and good, and all the pupils were neatly dressed. The water-supply is good, and ventilation is well attended to. There are the usual appliances for fighting fire. The buildings are in a fair state of repair, and all very clean. The roofs of the buildings have been painted.

The principal was preparing a better irrigating system to ensure better crops in the future. The land being sandy and dry, requires plenty of water. The balance of cash in hand would cover the cost.

On December 31, 1905, all bills were paid, and there was a balance on hand of \$357.53.

CROSBY GIRLS' HOME (METHODIST), NORTHWEST COAST AGENCY.

This school is situated at Port Simpson, on the Tsimpsean reserve, and was inspected on August 21 and 22, 1905. There were 45 girls enrolled and 44 present. They are recruited from Port Simpson and Nass River.

Inspected again on February 7 and 8, 1906; 46 girls were enrolled, and all present. The energetic staff is composed of: Miss Hannah M. Paul, principal; Miss Ida M. Clarke, matron; Miss Margaret E. Baker, assistant matron; Miss Sarah E. Scholefield, sewing teacher.

Five pupils had been admitted and 4 discharged during the year.

The pupils were classified as follows:—

	Pupils.
Standard I.	14
“ II	15
“ III.	0
“ IV.	15
“ V.	2
	46

These girls did remarkably well. The reading, writing, spelling, arithmetic and grammar of the older girls was excellent.

Good progress has been made by all during the year, and shows that they have been carefully taught. In demeanour and appearance these girls would compare favourably with white girls.

Mrs. Grenfell, the missionary's wife, has taught the girls music, both vocal and instrumental. They have made great progress, and I was surprised to see the knowledge the girls possessed. During my visit they gave a programme of songs, drills and recitations, all of which they rendered in a very pleasing manner. The girls played their own accompaniments.

All kinds of domestic work, such as the care of rooms, cooking, bread-making, laundry work, fancy-work, dressmaking, knitting and darning are taught the girls. All dresses and all underclothing are made by the girls. The large number of articles of clothing passing through the laundry each week come to the sewing-room for mending and darning before being placed in the store-room, and this constitutes an important part of the work. Some of the material for the articles made was furnished by the parents of the girls.

They have about 25 fowls.

On the whole, the health of the pupils has been good. Five cases of whooping-cough (one of which was serious) and one case of pleurisy occurred during the year. Food and clothing were sufficient, and all of good quality. I examined the food and saw the pupils at their meals. Water is abundant, coming from an unfailing mountain stream. This, with the rain-water, is conveyed through the house by pipes. The tank, which holds 4,000 gallons, is furnished with a filter, so that the water is pure.

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Drainage is not good; the drains are still open, but have been cleaned out lately. Pipes are needed to carry the sewage to the sea. They have the usual fire-fighting appliances. I inspected every part of the buildings, and found all clean, neat and in a good state of repair. The institution is carefully managed by a competent staff, and is doing satisfactory work.

On December 31, 1905, all bills were paid, and there was a balance on hand of \$190.45.

PORT SIMPSON BOYS' BOARDING SCHOOL (METHODIST), NORTHWEST COAST AGENCY.

I inspected this school on August 22, 1905. There were 21 pupils enrolled and 9 present. These were drawn from Simpson, Nass and Skeena River reserves. The school had had some difficulties for some time, but suggestions were made to the management by myself and Indian Agent Morrow, which will result in improving the institution.

I made an inspection again on February 8 and 9, 1906. There were 26 children enrolled, of whom 25 were present.

Mr. Charles M. Richards, principal for twelve years, resigned, and Mr. J. C. Butchart, B.A., was appointed principal, and was installed on January 1. Miss Mary Hortop was appointed matron.

The pupils were classified as follows:—

	Pupils.
Standard I.	8
" II.	5
" III.	11
" IV.	2
Total.	26

They have made fair progress during the year. The reading was very good, and the spelling, arithmetic, geography and drawing fair. The singing also was good. All pupils attend school from 10 to 12 a.m., and from 1.30 to 3.30 p.m. They attend the day school, for which new furniture will be required. Good blackboards have been put in the new class-rooms.

In summer the larger boys assist in the garden. The boys attend to the general housework, baking, mending, &c., under the direction of the matron. They also saw the wood used in the home and school.

There are 2 cows, 2 calves and 1 horse belonging to the school, and they have about 20 hens.

The health of the boys is good and there has been no serious illness since the first inspection. I saw the boys at their meals and the food was sufficient and good. The water-supply is good. It is brought some distance in a flume, but as in frosty weather the flume sometimes will not work, it would be better if pipes were laid.

There is no special fire-protection at present. I have advised the new principal to arrange for fire-drill and other precautions.

Since last inspection five pupils were admitted, but none discharged.

The buildings are very old, but in a fair state of repair, but in the near future new buildings will be required. I inspected every part of the building and found everything clean and satisfactory. Much better feeling has existed among the Indians towards the school since the investigation in August.

PORT SIMPSON DAY SCHOOL (METHODIST), NORTHWEST COAST AGENCY.

I inspected this school on August 22, 1905. Children of school age on the reserve 150, enrolled 50, of whom 16 were present.

Mr. J. Hamilton, who holds a first-class certificate, was the teacher at that time, but he intimated that he would prefer a white school. He resigned at Christmas.

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Inspected again on February 6, 1906. There were present 11 boys and 6 girls from the village, and 25 pupils from the boarding school. There are 42 pupils in standard I, 4 in standard II, and 4 in standard III.

The average attendance of the village children for twelve months was 13. The boys from the boarding school are not included in the classification given above.

Mrs. Emily B. Butchart was teaching until a qualified teacher could be obtained.

The new school-house, when furnished so that it can be occupied, will be a great advantage to the school. In the examination the pupils did very well. Their reading, spelling, arithmetic and singing were good, but more children should attend this school.

PORT ESSINGTON DAY SCHOOL (METHODIST), NORTHWEST COAST AGENCY.

I inspected this school on August 26, 1905, and again on February 19, 1906. Miss Kate Tranter, who has taught this school for sixteen years, is a very successful teacher. The enrolment is 41, of which 18 boys and 19 girls were present at inspection, the average attendance being 22.

They are graded as follows:—

	Pupils.
Standard I.	11
“ II.	13
“ III.	9
“ IV.	7
“ V.	1
Total.	41

This school is one of the best in my inspectorate. The teacher has the faculty of holding the attention, and of imparting knowledge to Indian children. She keeps them interested from morning until night. Having thoroughly mastered the Indian language, she can explain the English so that the children can grasp it. The children did exceedingly well, and their progress has been quite satisfactory. The school is kept open eleven months of the year, with a month's vacation in the fall.

METLAKATLA DAY SCHOOL (CHURCH OF ENGLAND), NORTHWEST COAST AGENCY.

Inspected on August 28, 1905, and on February 12, 1906. Miss Helena Jackson, the teacher, is assisted by Miss Sarah Legaic, a native woman. The enrolment is 31, of whom 14 are boys and 17 girls. Nineteen were present on the day of inspection. The girls from the industrial school also attend this school, and 27 of them were present.

The village children, being irregular, are much behind the Home girls, and are graded as follows:—

	Pupils.
Standard I.	19
“ II.	5
“ III.	2
“ IV.	2
Total.	28

The average attendance of the village children is 8. Miss Jackson is a good teacher and the children who attended regularly made a good showing. I was favourably impressed with the methods of teaching. The building used for school purposes is very poor. A suitable building should be erected very soon.

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METLAKATLA INDUSTRIAL SCHOOL (CHURCH OF ENGLAND), NORTHWEST COAST AGENCY.

This institution was inspected in August, 1905, and again from February 10 to 15, inclusive. The staff, in which there have been many changes during the year, is now composed as follows:—

J. R. Scott, principal; Miss M. F. Forbes, matron; Miss Helena Jackson, teacher; Miss DeBlois, assistant matron; John A. Boyd, trades' instructor; Wong Len, cook.

There were 33 boys and 29 girls enrolled, of whom 30 boys and 29 girls were present at inspection.

The pupils are recruited from the Northwest Coast and Babine agencies, and are graded as follows:—

	Pupils.
Standard I.	9
“ II.	13
“ III.	11
“ IV.	9
“ V.	20
Total.	62

I examined the boys in reading, arithmetic, writing, drawing, and geography, and the results were very satisfactory. They are well taught by the principal. The girls were examined in the above subjects and also in grammar and physiology, and did creditably. In both divisions the tone of work has improved.

The school-rooms are fairly well furnished, and provided with books, slates, &c., which have for the most part been supplied from the funds of the school.

There are two small gardens, one for each division of the school. In these are grown potatoes, cabbages, lettuce, rhubarb, radishes, and a quantity of small fruits. All the pupils work occasionally in the garden. Since my first visit to the school the grounds have been improved.

Mr. J. A. Boyd, who served an apprenticeship for seven years in England as carpenter and joiner, has been appointed trades' instructor, and had 12 pupils learning carpentry, &c. They were employed at the time of my visit finishing a new platform, 80 x 5 feet, made along the front of the main building of the boys' division.

They were also beginning the erection of a beacon for the Marine Department, at the entrance of the harbour. Two wardrobes, the work of the pupils, were shown to me, and were very well done.

The ventilation of the buildings was very good, and the drainage fairly satisfactory. I saw the pupils at their meals, and the food was quite sufficient. They all looked well nourished, and their clothing was clean and good. All the children were well-behaved. There are 7 water-tanks, which hold about 10,000 gallons, and the principal informed me that the department is about to purchase materials for another tank, that should, I think, be sufficient. Fire-extinguishers are filled and kept in readiness for any emergency in both divisions of the school. Other materials for protection against fire are at hand, and I understand that the department intended supplying them with a small force-pump and hose. Their brigade is well drilled.

There is scarcely sufficient accommodation in the boys' division, but in the girls' there is room enough.

The principal and his staff are doing excellent work.

TSARTLIP DAY SCHOOL (ROMAN CATHOLIC) COWICHAN AGENCY.

This school, which is located some 15 miles north of Victoria, was inspected in October, 1905, and in January and March, 1906. There are 22 children of school age near the school, all of whom are enrolled. At the inspection there were 16 present.

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Miss K. Needham took charge of the school on October 1, 1905. She commands the confidence of the Indians, and her earnestness and deep interest in the work ensures success.

Everything was satisfactory about this school; the pupils had made good progress and the school-room was neat and attractive.

SAANICH DAY SCHOOL (ROMAN CATHOLIC), COWICHAN AGENCY.

The teacher is William Thompson. I inspected the school in October, 1905, and in January and March, 1906. The number of children of school age on the reserve is 20: 15 boys and 5 girls. There were 5 present at inspection.

This school has gone seriously back within the last five years, since the older pupils, owing to age, went out. The results the past two years have been very insignificant. On my last visit the parents promised to send the girls who had not attended, and to send all more regularly. There are prospects of a little improvement.

SONGHEES DAY SCHOOL (ROMAN CATHOLIC), VICTORIA, COWICHAN AGENCY.

I inspected this school in October, 1905, in March, 1906, and on June 8, 1906. There are 5 boys and 9 girls of school age on the reserve, all of whom are enrolled, and were present at the inspection. They were graded thus:—

	Pupils.
Standard I.	7
“ II.	3
“ III.	0
“ IV.	4
Total.	14

Sister Mary Joseph took charge in November, 1905, and is an excellent teacher. The children were well dressed, clean and orderly, and would compare favourably with white children. The way they acquitted themselves in examination was surprising, and shows what can be done with Indian children.

The school is in good repair, well equipped, and very attractive with pictures and growing plants.

NANAIMO DAY SCHOOL (METHODIST), COWICHAN AGENCY.

I inspected this school on October 30, 1905. W. J. Knott is the teacher. At the inspection there were 4 boys and 9 girls present, making a total of 13. There are 30 children of school age on the reserve, of whom 23 were enrolled, the average attendance being 7. They are graded in the following manner:—

	Pupils.
Standard I.	9
“ II.	5
“ III.	1
	15

This school continues to do fair work. Mr. Knott is a painstaking and conscientious teacher, and has the confidence of the Indians. He is a useful man on the reserve. If the parents would send the children more regularly when they are home, they would make good progress.

The school building is in good repair and well kept.

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ALBERNI BOARDING SCHOOL (PRESBYTERIAN), WEST COAST AGENCY.

Inspected November 1 and 2, 1905. This school is prettily situated a short distance from the village of Alberni. The principal, Jas. R. Motion, is very energetic, and is ably supported by his staff, composed of H. G. Motion, matron; Kate Cameron, teacher; F. A. L. Stevens, assistant matron.

Twenty-six boys and 19 girls were enrolled, of whom 23 boys and 16 girls were present at inspection.

All the children speak and read distinctly in this school.

The pupils were graded thus:—

	Pupils.
Standard I.	4
" II.	10
" III.	16
" IV.	6
" V.	9
Total.	45

The pupils have made very good progress. Their reading was especially good. The class-rooms are equipped with all necessary material for carrying on the work.

They have about 6 acres of land under cultivation. Crops last year were 2 tons of hay, 8 tons of potatoes and 1 ton of carrots. Four of the boys can plough, and they do all the teaming for the school. Several stumps have been taken out. There is a garden of about 1 acre, in which all kinds of vegetables are grown.

There is a variety of small fruit, and a few apple, plum, peach and pear trees. They have 1 horse, 3 cows, 1 heifer and 1 calf. Several of the boys milk, and butter is being made. In the bake-shop there is a Hubbard oven, and the baking is done by the boys in sets of two each month. Four boys have painted several of the rooms of the school and have done it well.

The girls are taught cooking and all kinds of general housework, including sewing and fancy-work.

The health of the children has been, on the whole, good. I was present at the meals and saw that the food was good and plentiful. Clothing also was sufficient and of good quality.

A new well has been dug, which, when connected with the building, will provide a good supply. The school, being on a hill, is well situated as regards drainage. There are the usual fire-fighting appliances. I inspected the buildings and found them neat and clean, and in good repair. A new McClary range has been placed in the kitchen. The class-room, which is a detached building, is old and not worth repairing. The principal and his staff are working in harmony for the good of the school.

AHOUSAHT BOARDING SCHOOL (PRESBYTERIAN), WEST COAST AGENCY.

I inspected this school on November 5, 6 and 14, 1905. The staff consisted of the following: Mr. J. C. Butchart, B.A., principal; Mrs. Emily B. Butchart, matron; Miss Ellen C. MacKay, assistant matron; Miss Jean McNeil, teacher.

Mr. Butchart, who had been principal for over two years, and Mrs. Butchart, who was matron for the same length of time, had resigned and left for Victoria the night I arrived. Mr. J. T. Ross, a teacher from Dodgers Cove, came to supply until a new principal should come from Toronto.

There were 40 pupils enrolled, of whom 23 boys and 17 girls were present; 39 were recruited from the Ahousaht band and 1 from Ehattisaht. They were graded thus:—

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	Pupils.
Standard I.	8
“ II.	2
“ III.	16
“ IV.	8
“ V.	2
Total.	36

Four pupils are not yet graded.

The pupils read fairly well; arithmetic was good and the singing very good, but the order was very poor. I pointed out to the teacher the importance of preserving order, and I have no doubt that this will improve. The general condition of the school is satisfactory. There are two class-rooms, one for the larger pupils, the other for the smaller children, which are properly equipped.

They have about 140 acres of land belonging to the church, heavily timbered, with the exception of a lake covering about 15 acres. It will take a long time to clear the land. A small plot of land was cleared for a garden, but the ground was so sour that roots would not grow.

There is no live stock at this school.

The boys split the fire-wood, wash their clothes, bake the bread and take care of their own dormitories. The girls are taught sewing, washing, baking, darning and all general housework.

Four boys work with the principal doing carpentry, and others had painted the dormitories and oiled the floors.

Many of the children had whooping-cough, and while some had it lightly, others were quite ill. I saw the children at their meals, and the food was good and there was sufficient.

The water-supply is inadequate. They depend altogether on rain caught on the roof and run into tanks. This, however, will be improved. The drainage is good, and they have the usual appliances for fighting fire, but no drill.

The children are bright and doing well.

All the buildings were in good repair and clean from basement to attic. During the year a new wood-shed, frame, 18 x 24 feet, with posts 8 feet high, covered with rustic and shingles, was built.

CLAYOQUOT INDUSTRIAL SCHOOL (ROMAN CATHOLIC) WEST COAST AGENCY.

This school was inspected on November 6, 7 and 8, 1905.

I cannot speak too highly of the wise management of the principal and the excellent services of the matron. The school is a regular hive of industry. The staff is as follows: Rev. P. Maurus, principal; J. J. Swain, trades' instructor; Sister M. Placide, matron and teacher; Sister M. Clara, cook; Sister M. Clotilde, seamstress; Sister M. Elizabeth, assistant teacher and laundress.

There were 60 pupils enrolled, of whom 59 were present. They were classified thus:—

	Pupils.
Standard I.	8
“ II.	9
“ III.	12
“ IV.	19
“ V.	8
“ VI.	3
Total.	59

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The children were recruited from Clayoquot, Uchuelet, Ahousaht, Hesquiat, Mowachat, Machlat, Ehattisaht, Nuchatlat and Kyuquat bands.

One boy is absent in training with a professional shoemaker to enable him to instruct other pupils in this trade.

The pupils displayed a very lively interest in the examinations. In writing there has been great improvement, and one pupil received a diploma from A. N. Palmer for excellence in writing. Dictation, spelling, arithmetic, geography and grammar were remarkably good. They have not made as good progress in reading as in other subjects, but they read with understanding, and are able to explain what they read.

The class-room was only in temporary quarters at the time of the inspection, but the new class-room, which was nearing completion, should have new blackboards. Other material is sufficient and in good order.

There are 175 acres of land belonging to the school. This is heavily timbered, and only a little around the school is cleared. All the boys are instructed in gardening. Last year there was a fair crop of potatoes, carrots and other vegetables from the small garden.

The present stock consists of 1 cow, 1 heifer, 2 calves and 1 bull. They have also 50 hens. Two boys attend to the milking and to the feeding of the stock.

Eight pupils are in training with the trades' instructor.

During the year they have made many improvements about the buildings, built closets and laid floors, and have done all the cutting for the plumbers. Four boys painted ten rooms, which they did with credit. Two boys work in the shoe-shop attending to the repairing and half-soling of boots, one of the boys acting as foreman.

Some five boys learned, from an employed mason, the mixing of and working in concrete, so that they are able to do this kind of work alone.

The girls are taught all kinds of housework and sewing, and are proficient in fancy-work. They make their own and the boys' clothing, and are taught the preserving of fruit, and the curing of fish and meat.

The water-supply is excellent and abundant, and the drainage and ventilation are very good. The sewerage is splendid.

There are the usual precautions against fire, and they have a good drill.

They have one of the best buildings in the province. At the time of my last visit the boys' wing was still unfinished. A great deal of work has been done on the building since the first inspection, and done in first-class style. The management has gone to an expense of \$1,200 to ensure a perfect system of plumbing.

ST. ANSELM'S DAY SCHOOL (ROMAN CATHOLIC), WEST COAST AGENCY.

This school is situated on the Opitsaht reserve, Clayoquot. I visited it on November 9, 1905. A room in the priest's house was used as a school. Eleven children were enrolled, and 4 boys and 2 girls were present. The teacher is the Rev. C. Moser, O.S.B.

The pupils were graded thus:—

	Pupils.
Standard I.	8
“ II.	3
	11

Fair progress had been made by those pupils who had attended regularly; but their parents move around a great deal, taking the children with them.

CLAYOQUOT DAY SCHOOL (METHODIST), WEST COAST AGENCY.

I inspected this school on November 10, 1905. Rev. W. J. Stone is the teacher. There were 20 enrolled, of whom 7 boys and 8 girls were present. They were graded as follows:—

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	Pupils.
Standard I.	14
“ II.	4
“ III.	2
Total.	20

The pupils had improved in reading, writing and spelling. The school is held in a building, 19 x 37 feet, which is also used for church purposes.

ALERT BAY BOYS' INDUSTRIAL SCHOOL (CHURCH OF ENGLAND), KWAWKEWLTH AGENCY.

I inspected this school on December 4, 5 and 6, 1905, and again in February, 1906. There were 37 children enrolled, of whom 34 were present. They were graded as follows:—

	Pupils.
Standard I.	11
“ II.	2
“ III.	7
“ IV.	6
“ V.	6
“ VI.	2
	34

The pupils were recruited from the Kwawkewlth agency and from the northern tribes.

The staff at the time of inspection was composed of the following: Arthur W. Corker, principal; Mrs. A. W. Corker, matron; Miss L. Humphreys, assistant matron; Richard Willard, trades' instructor; George Luther, teacher; David Ah, cook.

The reading, writing and spelling were very good. Drawing was excellent, and their knowledge of geography and English grammar was good. The pupils have much improved in these studies. The programme of studies prepared by the department is adhered to.

They have sufficient class-room material, but the class-room itself is much too small for the number of pupils.

They have 340 by 700 feet of cleared ground, but the soil is very poor. Some good potatoes were raised last year, and in the garden there was a good crop of small fruits.

There are 2 cows, 2 calves, and about 50 fowls kept at the school. The milking is done by the boys, and all the milk is consumed at the school.

Fourteen boys receive regular instruction in carpentry, and I saw models of boats, stairways and ladders, all of which were well made. They attend also to the needed repairs about the buildings.

The boys take turns in the kitchen cooking and baking, and several are instructed in painting. They do all the laundering under the supervision of the assistant matron.

The general health was very good, and the food well cooked and sufficient. The water-supply is good, unless there is a very dry season.

There are the usual fire-fighting appliances, and the pupils are drilled occasionally.

The principal and staff are working harmoniously for the good of the institution, and the school has a very home-like look about it. I saw several ex-pupils working in the mill, and one is now a class-room teacher in the school. They are a credit to the institution.

ALERT BAY DAY SCHOOL (CHURCH OF ENGLAND), KWAWKEWLTH AGENCY.

This school was inspected on December 5, 1905. The teacher is Miss Emily Rhodes, B.Sc. There are 19 girls and 9 boys of school age on the reserve, and 16 are enrolled. Six girls were present at inspection.

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The pupils were graded thus:—

	Pupils.
Standard II.	2
“ III.	2
“ IV.	7
“ V.	5
Total.	16

A number of the pupils were sick at the time of my visit.

I told the parents of the compulsory attendance clause in the School Act, and they promised to send all the children. I paid a short visit to the school in April, and found a large attendance, all of which were working well. Miss Rhodes is a good teacher.

At the time of my last inspection the Alert Bay Girls' Home was closed, as the matron had resigned.

GWAYASDUMS DAY SCHOOL (CHURCH OF ENGLAND), KWAWKEWLTH AGENCY.

At the time of my visit to this agency the Indians were away from this village, and Mr. Pearson, the teacher, had followed them, and was holding school at the place where they were camping. I did not examine the school, but I saw some of the pupils and am satisfied that Mr. Pearson is doing good work.

CAPE MUDGE DAY SCHOOL (METHODIST), KWAWKEWLTH AGENCY.

This school is situated on Valdez island, and Mr. J. E. Rendle, who holds a first-class teacher's certificate, has charge of the school. I inspected the school on December 7, 1905, and found 16 pupils enrolled, of whom 4 boys and 5 girls were present at inspection. They were graded as follows:—

	Pupils.
Standard I.	8
“ II.	6
“ III.	2
Total.	16

This school is doing good work, and the children had made fair progress. The teacher takes great interest in the Indians and is useful on the reserve. The school-house is in good repair.

ST. MARY'S MISSION BOARDING SCHOOL (ROMAN CATHOLIC), FRASER RIVER AGENCY.

I inspected this school on December 21 and 22, 1905, and in March, 1906. The staff consists of Rev. C. Marchal, O.M.I., principal; Rev. Bro. Collins, O.M.I., band master and farm instructor; Sister M. Stanislas, matron; Sister M. Rogation, boys' teacher; Sister M. Monica, assistant boys' teacher; Sister M. Martha, girls' teacher; Sister M. Conception, assistant girls' teacher; Sister M. Prosper, cook for boys; Sister M. Michel, cook for girls.

There were 83 children enrolled, all of whom were present at inspection. They were graded as follows:—

	Pupils.
Standard I.	13
“ II.	10
“ III.	26
“ IV.	21
“ V.	8
Not graded.	5
Total.	83

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The examinations were very interesting and in all subjects the pupils did themselves credit. Both boys and girls were polite and orderly. The pupils are recruited from Fraser River agency, Stalo, Douglas and Thompson bands.

Some of the boys had mumps during the term, and several of the girls contracted them while at home on a vacation.

For protection against fire they have 8 fire-extinguishers, 48 buckets, and 255 feet of hose.

Seven boys and 2 girls were discharged during the year, for proficiency.

The school property consists of 420 acres.

The boys work on the farm, doing all necessary work. In the garden are grown all kinds of vegetables and small fruits.

In regard to the water-supply, I might say that a report is now before the department as to the needed improvement for greater pressure. Ventilation and drainage are both very good.

There is a large building for the girls and another for the boys, all in good repair, and with plenty of accommodation for both pupils and staff.

There are 40 head of cattle, 10 milch cows, and 5 horses.

The children learn to milk, churn, and have to keep the stables in order.

All the buildings were perfectly clean and everything in a satisfactory condition. The land here is not well adapted for grain. Last year they raised about 2 tons of wheat, 7 tons of oats, 2 tons of rye, 70 tons of hay-clover and timothy, and 20 tons of potatoes.

This is an excellent school and does the same work as the industrial schools. The Sisters in charge of the girls are very self-sacrificing, and both boys and girls are well-behaved, showing careful training.

ALL HALLOW'S BOARDING SCHOOL FOR GIRLS (CHURCH OF ENGLAND), FRASER RIVER AGENCY.

This school was inspected on March 20, 1906. The staff consists of the following: Sister Superior, principal; head mistress, Miss Kelly, B.A.; Miss B. Moody, assistant teacher; Miss Harris, assistant teacher; Mrs. A. Smith, matron; Rev. H. Underhill, chaplain.

There were 37 pupils enrolled, of whom 34 were present. They were graded thus:—

	Pupils.
Standard I.	6
" II.	6
" III.	7
" IV.	5
" V.	6
" VI.	7
Total.	37

I examined the pupils in reading, writing, arithmetic, spelling, English and Canadian history, geography, drawing and composition.

These girls have made good progress, they speak English well, and are very intelligent.

The class-rooms are well supplied with books, blackboards, maps, slates and other working materials.

They have 7 acres of land nicely laid out, and half an acre in garden planted with vegetables and fruit-trees. The girls work in the garden, and are taught all kinds of housework.

The general health of the pupils has been good, except for influenza in February.

They have several hundred feet of hose, a good water-supply, ladders and 36 buckets for fighting fire.

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The flooring in some of the apartments needs renewing and a report has been sent in to the department covering this and with recommendations that new floors be laid. The other parts of the building are in fair repair. I consider that this school is doing very satisfactory work. The children are well-behaved and show good training. The energetic principal is ably assisted by the other members of the staff. On March 26 all bills were paid, and there was a balance in hand of \$86.89.

KUPER ISLAND INDUSTRIAL SCHOOL (ROMAN CATHOLIC), COWICHAN AGENCY.

I inspected this school on January 9 and 10, and again on June 5 and 6, 1906. The staff comprised the following:—Rev. G. Donckele, principal; Rev. J. A. VanNevel, teacher for boys; H. Boede, shoemaker; E. Schnee, carpenter and farmer; Sister Mary Albert, matron; Sister Mary Evarist, assistant matron; Sister M. Etheldrida, teacher for girls; Sister M. Clemence, cook.

There were 68 pupils enrolled, of whom 63 were present. They were classified thus:—

	Pupils.
Standard I.	9
“ II.	11
“ III.	17
“ IV.	16
“ V.	10
“ VI.	5
Total.	68

The pupils were examined in the prescribed subjects, in all of which they did themselves credit. Both boys and girls are making satisfactory progress. The regular half-day system for school and work is observed.

This institution is a model one. The inspection was most gratifying. The pupils are receiving an excellent training in their several departments, and the order is good.

The class-rooms are equipped with all necessary material.

There are 70 acres under fence, of which 35 are ploughed. The crops last year were very good, and look favourable for this year. Both garden and orchard are doing well. They have a span of horses, 1 bull, 1 bullock, 8 cows, 2 heifers, 1 calf, 2 sows and about 120 fowls. The boys do the milking and operate the separator.

The girls are trained in every branch of housework and sewing and are clever at making their own clothes. There has been considerable sickness at the school, but at present all are well.

Food and clothing were sufficient and of a good quality. The drainage and ventilation were very good.

They have the usual fire-fighting appliances, but six of the old engines are useless, the chemicals having corroded them. I have made some recommendations to increase the effectiveness of the fire-appliances. The school is worthy of the generous support of the department.

The furnaces in the laundry have been lately rebuilt, and new baking-troughs have been made. I examined the books and found that at the end of the third quarter, viz., March 31, all bills were paid and there was a balance in hand of \$12.41.

SOMENOS DAY SCHOOL (ROMAN CATHOLIC), COWICHAN AGENCY.

The teacher at this school is the Rev. E. M. Scheelen. I inspected this school on January 11, and again on June 7, 1906.

There are 20 children of school age on the reserve, of whom 12 are enrolled. There were present at the June examination 4, and 2 of these were under five years of age. The average attendance is 3. One boy had made fair progress. The school-house is

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a frame building and in good repair. It is in the centre of the village and the children have only a few yards to walk, but the attendance is very irregular. Mr. Scheelen should be a good teacher and the children would improve if they would attend when in the village.

QUAMICHAN DAY SCHOOL (ROMAN CATHOLIC), COWICHAN AGENCY.

This school is on the Clemclemelets reserve, and Miss C. Ordano has charge of the school. It was inspected on January 11, and again on June 7, 1906. There are 25 children of school age in the vicinity of the school, and 22 are enrolled. Twelve were present at the January inspection and 3 in June.

The teacher informed me that some of the pupils had been engaged to pick strawberries for a farmer, on the last day of my visit. They had made a little progress and were graded thus:—

	Pupils.
Standard I.	17
“ II.	4
“ III.	1
Total.	22

The school is a frame building in good repair.

COWICHAN DAY SCHOOL (METHODIST), COWICHAN AGENCY, ON THE QUAMICHAN RESERVE.

I inspected this school on January 12 and on June 7, 1906. There are 56 children of school age on the reserve, 35 of whom were enrolled. There were 11 boys and 9 girls present at inspection, and the average attendance is 12.

Mr. O. B. Anderson is the teacher, and fair progress has been made during the year. The school is a frame building and is in very good repair.

KOKSILAH DAY SCHOOL (METHODIST).

Inspected June 7, 1906. This is a new school situated about 200 yards from the Koksilah station on the E. & N. railway, and close to the Koksilah reserve, on lots purchased by the Methodist Missionary Society for school purposes.

There are 31 children of school age on the reserve, of whom 18 were enrolled. Eight boys and 5 girls were present at inspection. All were beginners and in standard I. The Rev. C. M. Tate was teaching the school until Mr. Snow, who was engaged to teach, should arrive.

The school is a new frame building, 20 x 30 feet, with cupola. The parents of these children are mostly farmers, and do not roam around, so the children should be expected to attend regularly.

KITAMAAT DAY SCHOOL (METHODIST), NORTHWEST COAST AGENCY.

This school is situated on Kitamaat reserve, and Miss Dorothea J. Bower, M.D., is the teacher. At the time of my visit 25 boys and 31 girls were enrolled. The children were all crowded in a small building, 28 x 17 feet. The school is doing good work, but a larger school-room and better equipment is required. A report with recommendations has been forwarded to the department. The teacher is well qualified. A number of the girls are given a home and the attendance is well kept up. The bright and well-dressed pupils are graded as follows:—

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	Pupils.
Standard I.	36
“ II.	4
“ III.	15
“ IV.	1
Total.	56

MASSETT DAY SCHOOL (CHURCH OF ENGLAND), NORTHWEST COAST AGENCY.

This school, situated on the Massett reserve, Queen Charlotte island, was inspected on February 5, 1906. The number of children of school age on the reserve is 48, 28 boys and 20 girls. The average attendance for three months is 30. The pupils are graded as follows:—

	Pupils.
Standard I.	29
“ II.	15
“ III.	4
Total.	48

Rev. W. E. Collison is the teacher and Henry Edenshaw is his assistant.

The children did fairly well at the examinations. School was held in the Church Army hall. The new school-house was in course of erection and is greatly needed in this large village. A number of the most advanced pupils, formerly of this school, are in the industrial school at Metlakatla.

DAY SCHOOLS OF NORTHWEST COAST AGENCY.

BELLA COOLA DAY SCHOOL (METHODIST).

This school was inspected on April 14, 1906. Teacher, Miss Viola M. Lawson.

There were 42 pupils enrolled, of whom 23 were present at inspection. They were graded as follows:—

	Pupils.
Standard I.	39
“ II.	2
“ III.	1
Total.	42

The average attendance was 12. The children are bright and clean, and are making some progress. Miss Lawson is an experienced teacher, having taught the Skidegate Indian school for three years. She complains that the children are very irregular in attendance. As these people stay in the village nearly all the year, the attendance should be better. I hope for much improvement in this school at next inspection. The school-house is a poor building, built for a church over twenty years ago, and is worn out. The people ask for a boarding school.

BELLA BELLA DAY SCHOOL (METHODIST).

This school is located on the Bella Bella reserve. Teacher, Miss Mary A. Beatty. This school was inspected on September 5 and 6, 1905. There were enrolled 50 pupils, of whom 21 were present, 12 boys and 9 girls.

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Inspected again April 17 and 18, 1906. Present 22. Average attendance for twelve months, 18. Miss Beatty has taught the school for seven years, and is a fully qualified teacher. The children are bright, and are graded as follows:—

	Pupils.
Standard I.	25
“ II.	11
“ III.	9
“ IV.	5
Total.	50

The pupils did very well at the examination. They have all necessary equipment for the class-room, and the school-house is a very suitable building.

Besides the regular school studies, the girls are taught knitting, sewing and various kinds of fancy-work.

CHINA HAT DAY SCHOOL (METHODIST).

At the time of my visit, in April, the school was closed on account of sickness. Teacher, Miss Hannah Edgar. There were 24 pupils enrolled, classified as follows:—

	Pupils.
Standard I.	17
“ II.	7

The children spoke English nicely, and appeared to be getting on well.

HARTLEY BAY DAY SCHOOL (METHODIST).

I inspected this school on April 19, 1906. Teacher, George Reid, missionary. There were 15 enrolled, the average attendance being only 7. Whooping-cough and grippe had kept them home. At the time of my visit there were nine present, the others having gone out for the day to a camp a short distance from the village. The children are intelligent and can read, write, spell and count very well. They are classified as follows:—

	Pupils.
Standard I.	12
“ II.	1
“ III.	2

The teacher is a useful man on the reserve. A school-house is greatly needed, the school being held in the teacher's dwelling. The parents appreciate the work done in the school.

KITSELAS DAY SCHOOL (METHODIST).

This school is located on the Kitselas reserve, Skeena river. Inspected April 23, 1906. Pupils enrolled, 7; average attendance, 4. Teacher, Simon Ellis, a very bright, well-educated half-breed. He is very useful among the people. School is held in the church.

The pupils are graded as follows:—

	Pupils.
Standard I.	3
“ II.	3
“ III.	..
“ IV.	1

The children were well-dressed and very bright. They read, spell, figure and write very well.

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MEANSKINEESHT DAY SCHOOL (INDEPENDENT CHURCH OF ENGLAND MISSION), BABINE AND UPPER SKEENA AGENCY.

The school-house had been burned a few days previous to my visit, the roof having caught fire from the sparks from the stove. School, therefore, was closed, but I saw the pupils, who seemed very intelligent. Miss Annie Tomlinson is the teacher. They expect to reopen the school in a short time.

KITSEGUCLA DAY SCHOOL (METHODIST), BABINE AND UPPER SKEENA AGENCY.

Inspected April 25, 1906. The teacher, an educated Indian of Port Simpson, of the name of Lewis Grey, makes himself very useful among the Indians.

At the time of my visit there were 9 children enrolled, of whom 6 were present at inspection. The classification was as follows:—

	Pupils.
Standard I.	4
" II.	4
" III.	1
Total.	9

The children are neat and clean, and can read, spell, write and figure very well, and sing nicely.

ANDAMAUL DAY SCHOOL (SALVATION ARMY), BABINE AND UPPER SKEENA AGENCY.

This school is situated on private land. The teacher is Frank Parker, an officer in the Salvation Army. Number of children enrolled, 21; present at inspection, 21. Average attendance, 15. They are all doing well at their studies.

The pupils are graded as follows:—

	Pupils.
Standard I.	12
" II.	5
" III.	3
" IV.	1
Total.	21

KISHPIAX DAY SCHOOL (METHODIST), BABINE AND UPPER SKEENA AGENCY.

Inspected April 26, 1906. This school is situated on the Kishpiax reserve. Pupils enrolled, 55. Of these 23 were present at inspection, 7 boys and 16 girls. They were classified as follows:—

	Pupils.
Standard I.	52
" II.	1
" III.	2
Total.	55

Rev. W. H. Pierce is the teacher, and is assisted by Benjamin Brown. School is conducted in an Indian house. The pupils, with the exception of three, are all in the first standard, and for beginners, did very well. The benches and blackboards are worn out. The parents invited me to a council, at which they all spoke strongly in favour of a boarding school, which they request.

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GLEN VOWELL DAY SCHOOL (SALVATION ARMY), BABINE AND UPPER SKEENA AGENCY.

I inspected this school on April 27, 1906. The teacher, Mr. J. P. Thorkildson, is an officer in the Salvation Army. There were 32 children enrolled, of whom 16—6 boys and 10 girls—were present at inspection. The average attendance is 21. They were graded as follows:—

	Pupils.
Standard I.	22
“ II.	2
“ III.	8
Total.	32

The school-house is a frame building, 16 x 24 feet, and is in a good state of repair. I examined the children in reading, spelling, writing, arithmetic and geography, in all of which subjects they did well. They were all clean and well dressed. Their singing also was very good. The teacher and his wife are helping the Indians in many ways. I was very much pleased with this school.

HAZELTON DAY SCHOOL (CHURCH OF ENGLAND), BABINE AND UPPER SKEENA AGENCY.

This school is situated on the Kitamax reserve, in the village of Hazelton. Teacher, Miss E. J. Soal. Pupils enrolled, 23; of these, 7 boys and 4 girls were present at inspection. They are graded as follows:—

	Pupils.
Standard I.	13
“ II.	7
“ III.	2
“ IV.	1
Total.	23

Miss Soal is a well qualified and enthusiastic teacher. The pupils did well in reading, spelling, arithmetic, geography and writing. They were all neat and clean. Up to the time Miss Soal took charge, the school had been carried on in the Indian language. Good progress has been made in English during the past year, and the school is now in a very satisfactory condition.

KITWANGAR DAY SCHOOL (CHURCH OF ENGLAND), BABINE AND UPPER SKEENA RIVER AGENCY.

This school is situated on the Kitwangar reserve, on the bank of the Skeena river. I inspected this school on April 28, 1906.

There are 36 children of school age on the reserve, of whom 32 are enrolled. The average for six months was 16. There were 7 boys and 17 girls present at inspection. The Rev. A. E. Price is the teacher, and is assisted by a native.

The pupils are graded as follows:—

	Pupils.
Standard I.	22
“ II.	6
“ III.	4
Total.	32

I examined them in reading, writing and arithmetic. They did well, especially the girls in the third standard. They also sing well. The school is a frame building, 20 x 36 feet, well equipped, except that a good blackboard is needed. A night school

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is also conducted for young men who are over school age. The compulsory act, recently made known to these villages, is proving beneficial to the schools.

SQUAMISH BOARDING SCHOOL (ROMAN CATHOLIC), FRASER RIVER AGENCY.

This school is located at North Vancouver, and was inspected on September 28, 1905, and again on May 18, 1906.

The staff consists of Sister Mary Amy, principal; Sister Mary Eugene, matron; Sister Mary Jerome, teacher; Sister Mary Felician, teacher; Sister Mary Anatolie, cook.

There were 62 children enrolled, of whom 59 were present at inspection. They were classified as follows:—

	Boys.	Girls.	Total.
Standard I.	15	16	31
" II.	2	5	7
" III.	4	9	13
" IV.	2	2	4
" V.	0	3	3
" VI.	3	1	4
Total.			62

In reading, spelling, arithmetic, geography and grammar the pupils all did well. They answered all questions correctly and without hesitation. Both boys and girls are making satisfactory progress.

The school is in a prosperous condition, the classes well conducted and doing good work. The school has 14 acres of land, but only 2 are under cultivation.

Two acres are laid out in vegetable garden, orchard and flower beds, &c. The garden is well kept, and fair crops are raised. The boys do the gardening under the supervision of the gardener. The boys are taught shoemaking, glazing, painting, and the girls do all kinds of housework and fancy-work, including embroidery, lace crochet and real lace making.

The live stock consists of 2 cows, 1 calf and 1 horse. They have also about 60 chickens. The milking is done by the boys, and the girls make butter and cheese. All the pupils without exception seemed healthy, and food and clothing were suitable and sufficient. Plenty of fresh water is obtained from a mountain stream, and ventilation and drainage are good. The buildings are in good repair, and are kept scrupulously neat.

I am glad to state that these children won at the exhibition of North Vancouver, held September 16, 1905, 22 prizes—15 first and 7 second, for the girls' fancy-work, and for vegetables, fruits and flowers raised by the boys. The Mother Superior and staff are doing most excellent work.

WILLIAMS LAKE INDUSTRIAL SCHOOL (ROMAN CATHOLIC), NEAR THE 150 MILE HOUSE.

This school was inspected on May 22 to 27, inclusive. The staff consisted as follows: Rev. H. Boening, principal; C. H. Beget, carpenter; M. A. Walsh, foreman; Sister Euphrasia, matron and teacher of large boys; Sister Seraphim, teacher of small boys; Sister Gabriel, teacher of large girls; Sister Octavia, teacher of small girls; Sister Fabian, cook; Sister Elويد, assistant cook; Sister Joannes, seamstress.

There were 22 boys and 33 girls enrolled, making a total of 55, of whom 54 were present at inspection. They were recruited from the Williams Lake agency.

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The pupils were classified as follows:—

	Boys.	Girls.	Total.
Standard I.	7	10	17
" II.	0	6	6
" III.	3	6	9
" IV.	8	7	15
" V.	4	4	8
" VI.	0	0	0
Total.	22	33	55

Both boys and girls were examined in reading, spelling, writing, arithmetic, grammar, geography and drawing, and the results were very satisfactory. I would especially mention the 4 boys of the fifth standard, who would compare favourably with white boys of the same age in many schools. I was still more delighted with the progress of the 3 youngest, all of the third standard and only nine years of age. The progress of the girls in grammar, which is so often a difficult subject for Indian children, was particularly good. The 10 little girls of the first standard merit special mention on account of the progress made in reading, writing, spelling and arithmetic. Considering the short time these children have been at school—not quite a year—and their ignorance of the English language, their progress is more surprising. The programme of studies prepared by the department is adhered to, and the half-day system is observed. Material necessary to carry on the school work is sufficient, with the exception that in the girls' department desks made at the school many years ago are much worn, and will soon need to be replaced by something more up to date.

All land in connection with the school is the property of the Corporation of O.M.I. Total area, 4,000 acres. There are about 500 acres under cultivation, the remainder being grazing, timber and wild land. The crops of last season consisted of 300 tons of hay, 24 tons of oats, 26 tons of wheat, 1,800 pounds of pease, 50 tons of potatoes, and of other vegetables 5 tons. About 1 acre is in garden, where all vegetables and small fruits suitable to the climate are grown.

The stock consists of 25 horses, 450 head of cattle, 14 large and 30 small pigs. All are in good condition and well fed. They have 132 chickens and 2 ducks.

They have 20 milch cows, and made 1,100 pounds of butter at the institution last year; and besides this, from May to October, they made 80 pounds of cheese.

Since March a trades' instructor has had charge of 4 boys, who, besides general repairing, made benches for the sewing-room.

Some of the boys occasionally do the repairing of their own shoes, and others lend a helping hand in the blacksmith-shop under the direction of the trades' instructor, who is delighted with the progress the boys are making in this department. The girls are taught all branches of housework, and during the year have made many articles of clothing for themselves and for the boys. In addition to this they made all the flour sacks for last year's crop, amounting to 600 in all.

In no other school have I found the children as healthy as here. No contagious disease has existed for years. The food is good and abundant, and the children are all well clothed according to the seasons and work. They looked well in their blue sailor uniforms, all made at the institution. A large irrigating ditch passing through the school grounds gives plenty of good water in summer, but during the winter this supply is cut off by frost to a great extent, and they are obliged to haul the water for domestic purposes in barrels from a creek about half a mile distant.

Drainage and ventilation are good, and fire-fighting appliances are kept at hand and in good order; but still the danger from fire is great, particularly in winter when the water-supply is scarce, and stoves are burning in every part of the building.

Discipline is very good, and rewards are occasionally given for merit and good conduct. The buildings are all in good repair, and present a fine appearance. I in-

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spected every part of the building, and found all in splendid order. A new floor had been laid in the kitchen since last year. The dormitory contained everything necessary for the comfort of the pupils. I met several ex-pupils, all of whom appear to be doing very well, and whose homes were models of cleanliness. At the close of the inspection the pupils rendered a splendid programme, consisting of drills, motion songs, choruses and recitations. This school deserves great credit for the work done. It has a large field to work upon, for the Indians, learning to appreciate more and more the school and its work, are anxious to send their children even from the farthest points of the district.

KOOTENAY INDUSTRIAL SCHOOL (ROMAN CATHOLIC), NEAR CRANBROOK, ADJOINING ST. MARY'S RESERVE, KOOTENAY AGENCY.

Inspected on June 18 and 19, 1906. There were 50 pupils on the roll, and 7 not yet formally enrolled. Fifty-seven were present at inspection. I am pleased to report the continued success of this school. The staff consists of the following: Rev. J. Wagner, O.M.I., principal; Sister Sassilda, superior; Sister Justinian, girls' matron and seamstress; Sister Gervais, boys' matron and seamstress; Sister Angelica, teacher, junior division; Sister Cyr, assistant matron and seamstress; Sister M. Fidelis, teacher, senior division; Sister Focault, cook.

The pupils were recruited from St. Mary's, Lower Kootenay, Tobacco Plain, Columbia Lake and Windermere reserves.

The pupils were classified as follows:—

	Pupils.
Standard I.	5
“ II.	10
“ III.	20
“ IV.	4
“ V.	11
Total.	50

The 7 pupils who are awaiting admission are in standard I.

I examined the pupils in reading, writing, arithmetic, geography and grammar. The progress made during the year is very noticeable, and some of the children's parents who were present at the examination looked on with as much attention as though they knew and understood everything the children were doing. The regular school hours for boys are from 8 to 11.15 a.m., and for the girls from 1 to 4 p.m., with the usual recess. The official programme of studies is followed, and the general condition of the school is satisfactory.

The farm and garden are in a flourishing condition, and by all appearances they will have good crops this year. The garden, a model of neatness and a splendid object lesson to the Indians, is cared for by the boys. The large boys under the surveillance of the carpenter were building a shed, 50 x 15 feet, in the yard for the milch cows. They are much interested in carpentry.

The girls looked neat and tidy in a dark red uniform, cut out and made by themselves. They can make about 30 dresses or 30 skirts and 30 aprons in a month. Besides making new clothes they are taught to mend their old garments, and knit many pairs of stockings. The girls also attend to the laundry, through which over 1,000 articles pass every week. They attend also to the baking and to the dairy, and take their turns in the kitchen.

The live stock consists of 12 milch cows, 2 bulls, 20 young calves, 3 horses and 3 pigs. There are about 75 chickens.

The ventilation is as good as can be obtained from such small windows, and where there are such low ceilings as in the dormitories and elsewhere. The largest boys can

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touch the ceilings in their dormitories with their heads. There are the usual appliances for fire-fighting, and there are two stairs in each house, so that in case of fire they could easily escape.

The principal drew my attention to the foundations of the buildings, which are sinking fast. I took out my knife and picked at it and found the wood all rotten. To repair the foundations would be of very little use, as the floors in the dormitories are commencing to sink also. The buildings were built some 18 years ago before there were railroads or any of the conveniences for bringing in material, and the plan is very much out of date.

As this is the only school in the district, I would respectfully recommend new buildings as a thing really necessary for the health and accommodation of the children. The school commands the confidence of the parents and of the public, and is doing excellent work.

At the time of my visit to the Northwest Coast agency the schools on the Nass river were closed, the Indians being away from their villages fishing, and I was unable to reach Skidegate.

When I visited the west coast in the summer season the day schools at Kyuquot, Ohiaht (Dodgers Cove), Ucluelet and Yuquot were closed, and in the winter I was unable to reach them through stress of weather.

All the schools in the inspectorate are referred to in this report.

GENERAL REMARKS.

The ex-pupils with a few exceptions are doing well, and are a credit to the training received.

The Indians recognize more and more the advantage of the industrial and boarding schools, where their children are well supported, and receive mental and moral training, instead of following their parents in their nomadic life.

The Indians at a number of places pleaded with me for the establishment of boarding schools nearly for their children, and I believe such schools would do great good.

Some of the day schools do well, but generally speaking the attendance is so irregular that the children learn a little and then stay away till they forget, and so make but little progress.

The compulsory act should have a good effect. When the children are at home and living close by a day school, they should be required to attend.

I believe that the teachers are doing honest and conscientious work, and that their influence is a great factor for good on the reserves.

I have, &c.,

A. E. GREEN,

Inspector.

PART II

TABULAR STATEMENTS

FINANCIAL STATEMENTS

Showing Receipts and Expenditure of the various Boarding and Industrial Schools,
for the year ended June 30, 1906.

FORT WILLIAM ORPHANAGE, ONT.

(Roman Catholic.)

RECEIPTS.	¢	cts.	\$	cts.
Government grant.....			1,500	00
Sale of building to Grand Trunk Pacific Railway Company.....			21,325	00
Contributed from other sources.....			1,726	35
Value of clothing contributed.....			50	00
Total receipts.....			24,601	35
EXPENDITURE	¢	cts.	\$	cts.
Deficit, June 30, 1905.....	3,639	00		
Wages for manual labour.....	86	25		
Food.....	1,936	67		
Clothing.....	294	46		
Fuel and light.....	233	77		
Repairs.....	246	40		
Equipment and furniture (paid from contributions).....	422	59		
Miscellaneous.....	489	40		
Total expenditure.....	7,348	54		
Balance on hand June 30, 1906.....	17,252	81		
			24,601	35
			24,601	35

BIRTLE BOARDING SCHOOL, MAN.

(Presbyterian.)

RECEIPTS.	¢	cts.	\$	cts.
Government grant, per capita.....			5,048	60
" " sheeting basement.....			75	00
" " for fire-axes.....			15	00
Presbyterian church in Canada—salaries.....			2,014	78
" " furlough expenses.....			104	00
" " team of ponies.....			150	00
" " rebates.....			3	78
Clothing, W.F.M.S.....			800	00
Sundry receipts.....			187	37
Total receipts.....			6,399	13
EXPENDITURE	¢	cts.	\$	cts.
Deficit, June 30, 1905.....	372	83		
Salaries.....	1,932	00		
Food, \$1,507.08; feed, \$151.70.....	1,658	78		
Clothing, \$884.89; toilet, \$30.16; boots, \$162.76.....	1,077	81		
Fuel, \$358.34; light, \$90.50.....	448	84		
Buildings, \$108.67; repairs, \$217.28.....	325	95		
Equipment, \$411.09; furniture, \$80.18.....	491	27		
Miscellaneous, labour, \$14.55.....				
Interest, \$6.82; freight, \$148.37.....	521	17		
Stationery, \$28.70; travelling expenses, \$155.50.....				
Sundries, \$102.23; unrendered accounts, \$65.....				
Total expenditure.....	6,828	65		
Deficit, June 30, 1906: due bank, \$364.52; unrendered accounts, \$65.....			429	52
	6,828	65	6,828	65

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STATEMENT of Receipts and Expenditure for the year ended June 30, 1906—*Con.*

CECILIA JEFFREY BOARDING SCHOOL, MAN.

(Presbyterian.)

RECEIPTS.		\$ cts.	\$ cts.
Government grant, per capita.....			1,965 60
Contributed by the Women's Foreign Missionary Society—			
In cash for salaries.....	1,537 50		
In cash for other expenditure.....	450 60		
In clothing valued at.....	900 00		
			2,908 10
Contributed by the Foreign Mission Committee—			
For salaries.....	1,160 00		
For other expenditure.....	1,446 15		
			2,606 15
Received from other sources.....			192 00
Total receipts.....			7,671 85
EXPENDITURE.			
Salaries.....		2,717 50	
Food.....		1,754 47	
Clothing.....		1,037 89	
Fuel and light.....		196 25	
Buildings and repairs.....		1,312 20	
Equipment and furniture.....		12 70	
Miscellaneous.....		619 69	
Total expenditure.....		7,650 70	
Balance on hand, June 30, 1906.....		21 15	
		7,671 85	7,671 85

FORT ALEXANDER BOARDING SCHOOL, MAN.

(Roman Catholic.)

RECEIPTS.		\$ cts.	\$ cts.
Government grant, per capita.....			3,510 00
EXPENDITURE.			
Freight.....		400 25	
Furniture.....		445 05	
Salaries.....		1,137 00	
Clothing.....		1,182 40	
Food.....		1,526 20	
Fuel and light.....		150 00	
Farm.....		287 65	
Stone building.....		600 00	
Miscellaneous.....		108 30	
Total expenditure.....		5,836 85	
Excess of expenditure over receipts.....			2,326 85
		5,836 85	5,836 85

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STATEMENT of Receipts and Expenditure for the year ended June 30, 1906—*Con.*

FORT FRANCES BOARDING SCHOOL, MAN.

(Roman Catholic.)

RECEIPTS.		\$	cts.	\$	cts.
Government grant, per capita				535	20
From other sources				200	00
Total receipts				735	20
EXPENDITURE.					
Salaries and wages		228	00		
Food		323	52		
Clothing		521	10		
Fuel and light		60	00		
Equipment		55	00		
Miscellaneous		79	64		
Loan in September, 1905, for land		1,500	00		
Interest at 6 per cent.		90	00		
Total expenditure		2,857	26		
Deficit, June 30, 1906				2,122	06
		2,857	26	2,857	26

NOTE.—This is a new boarding school, being first opened on April 7, 1906.

KENORA BOARDING SCHOOL, MAN.

(Roman Catholic.)

RECEIPTS.		\$	cts.	\$	cts.
Government grant				2,026	40
Roman Catholic mission, grant				684	00
Total receipts				2,710	40
EXPENDITURE.					
Salaries		600	00		
Provisions		1,339	11		
Clothing		133	50		
Equipment		84	68		
Buildings		150	00		
Miscellaneous		493	11		
Total expenditure		2,710	40	2,710	40

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STATEMENT of Receipts and Expenditure for the year ended June 30, 1906—*Con.*

NORWAY HOUSE BOARDING SCHOOL, MAN.

(Methodist.)

RECEIPTS.		\$	cts.	\$	cts.
Government grant, paid through Methodist Missionary Society.....				5,500	00
Government grant for building purposes				956	40
Value of clothing donated.....				25	00
Board of day-school teacher				60	62
Board of agent.....				48	00
From other sources.....				362	14
Total receipts				6,952	16
EXPENDITURE.					
Salaries.....		1,549	45		
Dry goods, boots and shoes		1,128	45		
Drugs and stationery		100	07		
Hardware.....		368	86		
Groceries and feed		2,426	78		
Live stock.....		113	00		
Buildings and repairs.....		1,092	03		
Freight.....		581	90		
Total expenditure.....		7,360	54		
Excess of expenditure over receipts					408 38
				7,360	54
					7,360 54

PINE CREEK BOARDING SCHOOL, MAN.

(Roman Catholic.)

RECEIPTS.		\$	cts.	\$	cts.
Government grant, per capita				4,508	00
EXPENDITURE.					
Salaries		500	00		
Clothing.....		1,580	00		
Food.....		2,320	00		
Light and fuel.....		190	00		
Total expenditure		4,590	00		
Excess of expenditure over receipts					82 00
				4,590	00
					4,590 00

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STATEMENT of Receipts and Expenditure for the year ended June 30, 1906—*Con.*

PORTAGE-LA-PRAIRIE BOARDING SCHOOL, MAN.

(Presbyterian.)

RECEIPTS.		\$	cts.	\$	cts.
Balance on hand, June 30, 1905				42	70
Government grant, per capita				1,706	40
Value of clothing contributed				350	00
Contributions towards salary				900	00
Total receipts				2,999	10
EXPENDITURE.					
Salaries			900	00	
Food			904	62	
Clothing			384	85	
Equipment			181	74	
Fuel and light			217	05	
House furnishings			2	10	
Labour			105	80	
Drug bill			26	15	
Stationery			24	55	
Miscellaneous			39	78	
Total expenditure			2,786	64	
Balance on hand, June 30, 1906			212	46	
			2,999	10	2,999 10

SANDY BAY BOARDING SCHOOL, MAN.

(Roman Catholic.)

RECEIPTS.		\$	cts.	\$	cts.
Government grant, per capita				2,435	60
Loan				600	00
By way of clothing				250	00
Donations				150	00
From other sources				961	61
Total receipts				4,397	21
EXPENDITURE.					
Salaries			1,040	00	
Food			1,481	73	
Clothing			684	70	
Fuel and light			134	50	
Buildings and repairs			251	00	
Equipment and furniture			1,517	89	
Miscellaneous			503	38	
Total expenditure			5,613	20	
Excess of expenditure over receipts				1,215	99
			5,613	20	5,613 20

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STATEMENT of Receipts and Expenditure for the year ended June 30, 1906—*Con.*

COWESSESS BOARDING SCHOOL, SASK.

(Roman Catholic.)

RECEIPTS.		\$ cts.	\$ cts.
Government grant, per capita.....			3,162 00
Receipts from other sources.....			1,273 77
Total receipts.....			4,435 77
EXPENDITURE.			
Salaries.....	1,424 65		
Food.....	1,133 38		
Clothing.....	584 47		
Fuel and light.....	100 37		
Buildings and repairs.....	193 47		
Equipment and furniture (from per cap. grant).....	603 08		
Miscellaneous.....	1,247 03		
Total expenditure.....	5,286 45		
Excess of expenditure over receipts.....			850 68
	5,286 45	5,286 45	

CROWSTAND BOARDING SCHOOL, SASK.

(Presbyterian.)

RECEIPTS.		\$ cts.	\$ cts.
Balance on hand, June 30, 1905.....			14 22
Church grant.....			2,325 69
Government grant, per capita.....			3,276 00
Value of clothing contributed.....			720 00
Sale of produce and stock.....			878 93
Other sources.....			140 20
Total receipts.....			7,355 04
EXPENDITURE.			
Salaries.....	2,473 50		
Wages for extra labour.....	241 11		
Feed.....	146 80		
Food.....	1,093 00		
Clothing.....	864 50		
Fuel and light.....	316 93		
Buildings and repairs.....	1,045 20		
Equipment.....	462 89		
Repayment of building loan from Church.....	300 00		
Miscellaneous.....	354 47		
Total expenditure.....	7,298 40		
Balance on hand, June 30, 1906.....	56 64		
	7,355 04	7,355 04	

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STATEMENT of Receipts and Expenditure for the Year ended June 30, 1906—*Con.*

DUCK LAKE BOARDING SCHOOL, SASK.

(Roman Catholic.)

RECEIPTS.		\$	cts.	\$	cts.
Government grant, per capita				11,323	33
" " freight on old clothing				27	76
" " for cistern				500	00
Farm revenue				2,890	45
Donations				540	00
Inspector's board				3	00
Total receipts				15,284	54
EXPENDITURE.					
Deficit, June 30, 1905		333	57		
Salaries		2,010	30		
Provisions		3,473	51		
Clothing		1,264	80		
Fuel and light		887	07		
Medical		11	75		
Freight and express		329	00		
Farm		2,365	85		
Miscellaneous		3,373	56		
House furniture		388	20		
Buildings and repairs		1,037	85		
Office expenses		5	79		
House fixtures		14	80		
Total expenditure		15,586	05		
Excess of expenditure over receipts				301	51
		15,586	05	15,586	05

EMMANUEL COLLEGE, SASK.

(Church of England.)

RECEIPTS.		\$	cts.	\$	cts.
Indian Department, per capita grant				4,006	66
Proceeds from farm				708	44
Women's auxiliary				978	80
Divinity professorship				500	00
Church missionary society				250	00
Donations				41	45
Bank rebate				27	10
EXPENDITURE.					
Clothing		1,257	46		
Provisions		2,266	87		
Salaries		1,865	95		
Fuel and light		261	93		
O. H. help		93	00		
Equipment		218	25		
Repairs		60	78		
Miscellaneous		488	21		
		6,512	45	6,512	45

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STATEMENT of Receipts and Expenditure for the Year ended June 30, 1906—*Con.*

FILE HILLS BOARDING SCHOOL, SASK.

(Presbyterian.)

RECEIPTS.	\$ cts.	¢ cts.
Balance of unexpended building money.....		40 69
Government grant, per capita.....		1,126 80
Salaries (W.F.M.S.).....		1,600 00
Staff contributions for wages.....		27 79
Sale of garden and farm produce.....		91 35
Earned by school.....		66 50
Board, principal and teacher.....		182 00
Board, non-treaty child.....		16 00
Discount on accounts.....		7 35
Donation of eve-troughs from a friend.....		25 00
Donations from File Hills Indian congregation and friends.....		84 65
Clothing (W.F.M.S.).....		300 00
Total receipts.....		3,568 04
EXPENDITURE.		
Deficit, June 30, 1905.....	508 79	
Provisions.....	581 56	
Clothing (W.F.M.S.).....	300 00	
Children's clothing.....	96 47	
Fuel and light.....	72 05	
House and kitchen.....	117 84	
Salaries of staff.....	1,600 00	
Wages.....	120 95	
General expense.....	252 29	
Building.....	40 69	
Range and stove.....	93 00	
Wall paper.....	7 14	
Eve troughs.....	25 00	
Threshing.....	18 00	
Wheat.....	24 00	
Crematory closet.....	25 00	
Cow.....	40 00	
Paint.....	17 00	
Hens.....	14 00	
Tent.....	20 00	
Total expenditure.....	3,983 78	
Excess of expenditure over receipts.....		415 74
	3,983 78	3,983 78

ISLE A LA CROSSE BOARDING SCHOOL, SASK.

(Roman Catholic.)

RECEIPTS.	\$ cts.	\$ cts.
Government grant, per capita.....		1,440 00
" for medicines.....		62 74
Donations.....		30 00
Paid by R. C. mission.....		726 86
EXPENDITURE.		
Food.....	859 00	
Clothing.....	100 00	
Fuel and light.....	150 00	
Miscellaneous.....	65 00	
Salaries.....	285 00	
Work and supplies furnished by R. C. mission.....	800 60	
	2,259 60	2,259 60

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STATEMENT of Receipts and Expenditure for the Year ended June 30, 1906—*Cont.*

KEESEKHOUSE BOARDING SCHOOL, SASK.

(Roman Catholic.)

RECEIPTS.		\$ cts.	\$ cts.
Government grant, per capita ..			1,539 28
Contributions from other sources ..			450 95
Contributed by way of clothing, &c.			173 00
Total receipts			2,163 23
EXPENDITURE.			
Salaries and wages ..	334 35		
Food ..	1,074 85		
Clothing ..	155 14		
Fuel and light ..	228 62		
Buildings and repairs ..	76 51		
Equipment and furniture (not paid by government) ..	100 30		
Miscellaneous ..	203 30		
Total expenditure ..	2,173 07		
Excess of expenditure over receipts ..			9 84
	2,173 07	2,173 07	

ONION LAKE BOARDING SCHOOL, SASK.

(Roman Catholic.)

RECEIPTS.		\$ cts.	\$ cts.
Government grant, per capita ..			2,424 00
" " buildings and repairs ..			1,112 00
Pupil boarders ..			437 00
Farm and garden ..			468 00
From other sources ..			1,075 00
Gifts ..			102 25
Total receipts			5,618 25
EXPENDITURE.			
Deficit, June 30, 1905 ..	687 48		
Salaries ..	960 00		
Wages ..	151 25		
Food ..	1,264 52		
Clothing ..	845 30		
Fuel and light ..	129 00		
Miscellaneous ..	309 64		
Expenses of the farm ..	158 00		
Buildings and repairs ..	2,404 00		
Total expenditure ..	6,909 19		
Excess of expenditure over receipts ..			1,290 94
	6,909 19	6,909 19	

6-7 EDWARD VII., A. 1907

STATEMENT of Receipts and Expenditure for the Year ended June 30, 1906—*Con.*

ONION LAKE BOARDING SCHOOL, SASK.

(Church of England.)

RECEIPTS.		\$	cts.	\$	cts.
Government grant, per capita				834	40
" for paint, oil and brushes				134	00
Farm and garden produce				346	00
Missionaries salaries paid by the Church Missionary Society				600	00
Women's Auxiliary, salary of two of the ladies of staff				300	00
Donations from friends				102	00
Bishop of Saskatchewan—Donations from different Sunday schools and friends in Ontario and Quebec				155	75
Donation from Rector and Sunday School, St. Peter's Church, Toronto				22	00
Clothes, bedding and supplies from the Women's Auxiliary				513	00
From private funds				1,799	85
EXPENDITURE.					
Salaries	1,394	00			
Wages	560	00			
Carpenters and painters	238	00			
Fuel and light	289	00			
Provisions and groceries	1,344	00			
Clothing and bedding	480	00			
Freight and express	200	00			
Paint, paint oil and brushes	134	00			
Boots and shoes	168	00			
	4,807	00		4,807	00

ROUND LAKE BOARDING SCHOOL, SASK.

(Presbyterian.)

RECEIPTS.		\$	cts.	\$	cts.
Government grant, per capita				1,858	85
From Presbyterian Church for salaries				1,750	00
W. F. M. S. clothing				500	00
Board				250	00
Contributions				83	80
Farm produce				1,683	00
Total receipts				6,125	65
EXPENDITURE.					
Salaries	2,170	00			
Food	1,855	55			
Clothing	610	00			
Fuel and light	238	00			
Repairs	137	46			
Farm expense	1,045	42			
Other expenses	417	87			
Total expenditure	6,474	30			
Excess of expenditure over receipts				348	65
	6,474	30		6,474	30

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STATEMENT of Receipts and Expenditure for the year ended June 30, 1906—*Con.*

THUNDERCHILDS BOARDING SCHOOL, SASK.

(Roman Catholic.)

RECEIPTS.		\$ cts.	\$ cts.
Amount contributed by government under per capita grant.			1,426 20
Amount of contributions from other sources.			491 10
Amount contributed by way of clothing.			124 05
Total receipts			2,041 35
EXPENDITURE			
Deficit, June 30, 1905.		2,583 60	
Salaries.		380 00	
Food.		1,140 00	
Clothing.		142 05	
Fuel and light.		113 20	
Wages.		16 10	
Total expenditure.		4,374 95	
Excess of expenditure over receipts.			2,333 60
		4,374 95	4,374 95

BLOOD BOARDING SCHOOL, ALBERTA.

(Church of England.)

RECEIPTS.		\$ cts.	\$ cts.
Government grant, per capita.			2,588 40
Other sources (the church, etc.)			2,057 65
Value of clothing, etc., in bales.			700 00
Total receipts			5,346 05
EXPENDITURE.			
Balance, July 1, 1905.		387 03	
Salaries.		1,779 50	
Food.		1,669 09	
Clothing.		1,024 52	
Fuel and light.		540 48	
Buildings and repairs.		332 82	
Furnishing and equipment		127 73	
Miscellaneous.		702 68	
Total expenditure.		6,563 85	
Excess of expenditure over receipts.			1,217 80
		6,563 85	6,563 85

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BLOOD BOARDING SCHOOL, ALBERTA.

(Roman Catholic.)

RECEIPTS.	\$ cts.	\$ cts.
Government grant, per capita.....		2,873 05
" " " for buildings and repairs.....		300 00
Church grant.....		1,500 00
Contributions from other sources.....		84 50
Total receipts.....		4,757 55
EXPENDITURE.		
Salaries.....	850 00	
Fuel and light.....	240 15	
Clothing.....	284 90	
Food.....	1,039 35	
Buildings and repairs.....	384 50	
Equipment and furniture.....	439 95	
Deficit, June 30, 1905.....	2,137 75	
Total expenditure.....	5,376 60	
Excess of expenditure over receipts.....		619 05
	5,376 60	5,376 60

BLUE QUILLS BOARDING SCHOOL, ALBERTA.

(Roman Catholic.)

RECEIPTS.	\$ cts.	\$ cts.
Government grant, per capita.....		2,315 40
From other sources.....		430 00
Donations.....		209 67
Total receipts.....		2,955 07
EXPENDITURE.		
Deficit, June 30, 1905.....	671 65	
Salaries of staff.....	850 00	
Wages.....	395 00	
Food.....	1,082 40	
Clothing.....	423 31	
Fuel and light.....	26 10	
Buildings, repairs and fences.....	184 63	
Freight and express.....	189 82	
Equipment and furniture.....	96 18	
Miscellaneous.....	14 95	
Total expenditure.....	3,934 04	
Excess of expenditure over receipts.....		978 97
	3,934 04	3,934 04

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STATEMENT of Receipts and Expenditure for the year ended June 30, 1906—*Con.*

CROWFOOT BOARDING SCHOOL, ALBERTA.

(Roman Catholic.)

RECEIPTS.	\$ cts.	\$ cts.
Government grant, per capita		2,022 60
" " for repairs		150 00
Church grant		1,200 00
Other sources		200 00
Total receipts		3,572 60
EXPENDITURE.		
Deficit, June 30, 1905	546 00	
Salaries	950 00	
Food	1,150 00	
Clothing	300 00	
Fuel and light	250 00	
Storm windows, paid by department	150 00	
Equipment and furniture	250 00	
Miscellaneous	50 00	
Total expenditure	3,646 00	
Excess of expenditure over receipts		73 40
	3,646 00	3,646 00

ERMINESKIN'S BOARDING SCHOOL, ALBERTA.

(Roman Catholic.)

RECEIPTS.	\$ cts.	\$ cts.
Balance on hand, June 30, 1905		13 61
Government grant, per capita		3,590 40
Contributions from other sources		105 00
Total receipts		3,709 01
EXPENDITURE.		
Balance due on cost of main building	3,500 00	
Building for new laundry	1,300 00	
Salaries	1,000 00	
Food	2,100 00	
Clothing	320 00	
Fuel and light	150 00	
Total expenditure	8,370 00	
Excess of expenditure over receipts		4,660 99
	8,370 00	8,370 00

6-7 EDWARD VII., A. 1907

STATEMENT of Receipts and Expenditure for the year ended June 30, 1906—*Con.*

FORT CHIPEWYAN (HOLY ANGELS) BOARDING SCHOOL, ALBERTA.

(Roman Catholic.)

RECEIPTS.		\$ cts.	\$ cts.
Government grant, per capita			2,682 00
Paid by R. C. mission			2,592 00
EXPENDITURE.			
Salaries	1,000 00		
Food	1,862 00		
Clothing	1,972 00		
Fuel	400 00		
Light	40 00		
	5,274 00		5,274 00

McDOUGALL ORPHANAGE BOARDING SCHOOL, ALBERTA.

(Methodist.)

RECEIPTS.		\$ cts.	\$ cts.
Government grant, per capita			2,271 80
Methodist Missionary Society			5,099 67
Board, etc.			161 50
EXPENDITURE.			
Salaries	1,850 60		
Groceries and provisions	1,334 90		
Clothing, \$554.85; boots and shoes, \$113.40	668 25		
Fuel and light, \$328.96; hardware and house account, \$406.60	735 56		
Office expenses, telegrams and advertising	23 62		
Travelling expenses	348 30		
Horses and cattle	1,300 50		
Buildings and repairs	232 05		
Freight, express and extra labour	265 72		
Ranch, \$315; farm implements and wagons, \$420	735 00		
Taxes, \$34.87; bank discount, \$3.60	38 47		
	7,532 97		7,532 97

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STATEMENT of Receipts and Expenditure for the Year ended June 30, 1906—*Cont.*

OLD SUN'S BOARDING SCHOOL, ALBERTA.

(Church of England.)

RECEIPTS.	£	cts.	8	cts.
Government grant, per capita.....			2,317	82
Other sources (the church, etc.).....			2,141	41
Value of clothing, etc., in bales.....			660	00
Total receipts.....			5,119	23
EXPENDITURE.				
Balance, July 1, 1905.....		2	33	
Salaries.....	1,472	66		
Food.....	1,184	83		
Clothing.....	705	37		
Fuel and light.....	276	45		
Repairs.....	164	12		
Furnishing and equipment.....	94	24		
Miscellaneous.....	311	40		
Interest on \$3,000 loan.....	150	00		
Total expenditure.....	4,361	40		
Balance on hand, June 30, 1906.....		757	83	
		5,119	23	5,119 23

PEIGAN BOARDING SCHOOL, ALBERTA.

(Church of England.)

RECEIPTS.	£	cts.	8	cts.
Balance, July 1, 1905.....			80	75
Government grant, per capita.....			1,802	60
Other sources (the church, etc.).....			1,354	07
Value of clothing in bales.....			500	00
			3,737	42
EXPENDITURE.				
Salaries.....	909	30		
Food.....	1,388	06		
Clothing.....	608	80		
Fuel and light.....	176	68		
Repairs.....	123	23		
Furnishings and equipment.....	79	39		
Miscellaneous.....	321	25		
Total expenditure.....	3,606	71		
Balance in hand, June 30, 1906.....		130	71	
		3,737	42	3,737 42

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STATEMENT of Receipts and Expenditure for the Year ended June 30, 1906—*Con.*

PEIGAN BOARDING SCHOOL, ALBERTA.

(Roman Catholic.)

RECEIPTS	\$ cts.	\$ cts.
Government grant, per capita.		1,926 80
Contributed from various sources		1,107 07
Total receipts.....		3,033 87
EXPENDITURE.		
Deficit, June 30, 1905.....	370 42	
Salaries.....	650 00	
Food.....	1,463 93	
Clothing and shoes.....	396 06	
Fuel and light.....	216 90	
Travelling expenses	251 78	
Furniture.....	158 84	
Repairs to buildings.....	35 95	
Total expenditure.....	3,543 88	
Excess of expenditure over receipts.....		510 01
	3,543 88	3,543 88

SARCEE BOARDING SCHOOL, ALBERTA.

(Church of England.)

RECEIPTS.	\$ cts.	\$ cts.
Government grant, per capita.....		1,017 60
Other sources (the church, etc.).....		950 81
Value of clothing, etc., in bales		300 00
Total receipts		2,268 41
EXPENDITURE		
Balance, July 1, 1905.....	334 90	
Salaries	550 00	
Food	698 45	
Clothing	321 25	
Fuel and light.....	283 10	
Repairs.....	79 80	
Furnishing and equipment	23 59	
Miscellaneous.....	203 00	
Total expenditure.....	2,494 00	
Excess of expenditure over receipts.....		225 59
	2,494 00	2,494 00

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STATEMENT of Receipts and Expenditure for the Year ended June 30, 1906—*Con.*

ST. ALBERT BOARDING SCHOOL, ALBERTA.

(Roman Catholic.)

RECEIPTS.	\$ cts.	\$ cts.
Government grant, per capita		4,881 00
From other sources		462 00
Total receipts		5,343 00
EXPENDITURE.		
Wages of farmers	930 00	
" baker	240 00	
Food	1,265 45	
Clothing	683 42	
Fuel and light	195 00	
Miscellaneous	42 07	
Buildings and repairs	841 00	
Deficit, June 30, 1905	1,449 17	
Total expenditure	5,646 11	
Excess of expenditure over receipts		303 11
	5,646 11	5,646 11

WABISKAW LAKE BOARDING SCHOOL, ALBERTA.

(Roman Catholic.)

RECEIPTS.	\$ cts.	\$ cts.
Government grant, per capita		1,800 00
From R. C. mission		350 00
Total receipts		2,150 00
EXPENDITURE.		
Salaries	1,050 00	
Food	700 00	
Clothing	250 00	
Fuel and light	150 00	
	2,150 00	2,150 00

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AHOUSAHT BOARDING SCHOOL, B.C.

(Presbyterian.)

RECEIPTS.	\$ cts.	\$ cts.
Government grant, per capita.....		1,500 00
Grant from Presbyterian Church.....		1,750 00
Grant from Presbyterian Church for buildings and repairs.....		242 69
Grant from Presbyterian Church for drain.....		200 00
Clothing, W. F. M. S.....		678 00
Other contributions.....		36 28
Total receipts.....		4,406 97
EXPENDITURE.		
Deficit, June 30, 1905.....	52 18	
Salaries.....	1,250 00	
Food.....	1,465 90	
Clothing.....	718 00	
Fuel and light.....	95 00	
Buildings and repairs.....	275 69	
Drain from lake.....	173 00	
Freight.....	81 60	
Miscellaneous.....	125 70	
Total expenditure.....	4,237 07	
Balance on hand, June 30, 1906.....	169 90	
	4,406 97	4,406 97

ALBERNI BOARDING SCHOOL, B.C.

(Presbyterian.)

RECEIPTS.	\$ cts.	\$ cts.
Government grant.....		2,261 00
Grant from W. F. M. S. of Presbyterian Church.....		1,833 55
" " for kitchen range.....		134 20
" " buildings.....		50 00
" " travelling expenses.....		63 25
Clothing from W. F. M. S.....		500 00
Total receipts.....		4,842 00
EXPENDITURE.		
Deficit, June 30, 1905.....	100 80	
Salaries.....	1,535 00	
Food.....	1,695 55	
Clothing.....	597 21	
Light.....	44 25	
Miscellaneous.....	625 33	
Labour.....	180 00	
Buildings.....	98 55	
Kitchen range.....	134 20	
Travelling expenses.....	63 25	
Total expenditure.....	5,074 14	
Excess of expenditure over receipts.....		232 14
	5,074 14	5,074 14

SESSIONAL PAPER No. 27

STATEMENT of Receipts and Expenditure for the Year ended June 30, 1906—*Con.*

PORT SIMPSON BOYS' HOME, B.C.

(Methodist.)

RECEIPTS.		\$	cts.	\$	cts.
Government grant, per capita.....				1,037	00
Missionary Society, Methodist Church.....				1,372	01
Other sources.....				285	66
Total receipts.....				2,694	67
EXPENDITURE.					
Deficit, June 30, 1905.....		307	56		
Salaries.....		761	33		
Travelling expenses.....		35	45		
Food.....		665	45		
Clothing.....		24	60		
Fuel and light.....		129	80		
Freight and wharfage.....		149	16		
Live stock.....		213	75		
Feed for stock.....		89	39		
Building and repairs ..		21	07		
Furniture and equipment.....		60	60		
Medical supplies, (paid by school) ..		8	65		
Miscellaneous.....		22	95		
Total expenditure.....		2,489	76		
Balance on hand, June 30 ..		204	91		
		2,694	67	2,694	67

PORT SIMPSON GIRLS' HOME, B.C.

(Methodist.)

RECEIPTS.		\$	cts.	\$	cts.
Government grant, per capita.....				2,100	00
Grant from Women's Missionary Society, Methodist Church in Canada.....				2,662	50
From other sources.....				14	25
Total receipts.....				4,776	75
EXPENDITURE					
Deficit, June 30, 1905.....		58	99		
Salaries.....		1,650	00		
Food.....		1,451	50		
Clothing.....		493	64		
Fuel and light.....		248	80		
Buildings and repairs.....		487	23		
Equipment and furniture.....		117	37		
Miscellaneous.....		466	84		
Total expenditure.....		4,974	37		
Excess of expenditure over receipts.....				197	62
		4,974	37	4,974	37

6-7 EDWARD VII., A. 1907

STATEMENT of Receipts and Expenditure for the Year ended June 30, 1906—*Con.*

SECHELT BOARDING SCHOOL, B.C.

(Roman Catholic.)

RECEIPTS.	\$ cts.	\$ cts.
Government grant, per capita		2,652 50
Grant from His Lordship Bishop Dontenwill.		800 00
Total receipts.....		3,452 50
EXPENDITURE.		
Deficit, June 30, 1905	540 00	
Food and clothing	1,976 00	
Furniture and equipment.....	376 00	
Trees, seeds, etc	108 00	
Light.....	58 00	
Lumber.....	78 00	
Stationery and drugs.	85 00	
Water pipes.....	105 00	
Miscellaneous.....	200 00	
Total expenditure.	3,526 00	
Excess of expenditure over receipts		73 50
	3,526 00	3,526 00

SQUAMISH BOARDING SCHOOL, B.C.

(Roman Catholic.)

RECEIPTS.	\$ cts.	\$ cts.
Government grant, per capita		3,000 00
Receipts from produce sold.....		170 00
" " other sources.....		2,000 00
Total receipts.....		5,170 00
EXPENDITURE.		
Wages of gardener.....	300 00	
Food and clothing	3,274 40	
Insurance and taxes	225 60	
Fuel and oil	100 55	
Travelling expenses	200 45	
Medical expenses	105 00	
Equipment and furniture.....	235 00	
Buildings and repairs.....	645 00	
Miscellaneous.....	84 00	
Total expenditure	5,170 00	5,170 00

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STATEMENT of Receipts and Expenditure for the year ended June 30, 1906—*Con.*

ST. MARY'S MISSION BOARDING SCHOOL, B.C.

(Roman Catholic.)

RECEIPTS.		£	cts.	£	cts.
Government grant, per capita.....				3,600	00
Receipts from farm and garden.....				1,400	00
Grant from St. Mary's Mission.....				1,452	00
Total receipts.....				6,452	00
EXPENDITURE.		£	cts.	£	cts.
Deficit, June 30, 1905.....		242	00		
Salaries.....		1,560	00		
Food.....		2,926	67		
Clothing.....		290	00		
Fuel and light.....		700	00		
Repairs.....		450	00		
Equipment and furniture.....		150	00		
Miscellaneous.....		200	00		
Total expenditure.....		6,518	67		
Excess of expenditure over receipts.....					65 67
		6,518	67	6,518	67

YALE (ALL HALLOWS) BOARDING SCHOOL, B.C.

(Church of England.)

RECEIPTS.		£	cts.	£	cts.
Balance on hand, June 30, 1905.....				83	94
Government grant, per capita.....				1,953	00
S.P.C.K. scholarships.....				240	00
Donations.....				253	95
Sales of clothing and needlework.....				40	36
Total receipts.....				2,571	25
EXPENDITURE.		£	cts.	£	cts.
Housekeeping expenses.....		1,197	00		
Laundry.....		199	00		
Salaries.....		650	00		
Fuel and oil.....		110	00		
Freight.....		112	00		
Medicine and doctor's bills.....		25	00		
Books and stationery.....		50	00		
Clothing and boots.....		45	35		
Repairs.....		37	20		
Travelling expenses.....		16	00		
Miscellaneous.....		85	70		
Total expenditure.....		2,521	25		
Balance on hand, June 30, 1906.....			50 00		
		2,571	25	2,571	25

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STATEMENT of Receipts and Expenditure for the year ended June 30, 1906—*Con.*

SHINGWAUK HOME, ONT.

(Church of England.)

RECEIPTS.	\$ cts.	\$ cts.
Government grant, per capita.....		3,482 00
" " for special purposes.....		111 00
From other sources, England.....		1,973 19
" " Canada.....		3,391 66
Total receipts.....		8,957 85
EXPENDITURE.		
Deficit, June 30, 1905.....	428 92	
Salaries.....	2,807 68	
Food.....	2,801 66	
Clothing, boots, &c.....	792 10	
Fuel, light and water.....	1,462 14	
Repairs to buildings.....	377 62	
Equipment and furniture.....	294 33	
Office expenses, insurance, &c.....	312 23	
Travelling expenses and children's amusements, &c.....	197 12	
Hospital expenses and doctor.....	545 07	
Pocket money.....	78 20	
Laundry expenses.....	120 53	
Miscellaneous.....	71 87	
Total expenditure.....	10,289 47	
Gain on all trades.....		55 25
Apparent gross deficit.....		1,276 37
	10,289 47	10,289 47
Gross deficit.....		1,276 37
Partially covered by stock and cash not received.....	468 36	
Actual cash deficit, June 30, 1906.....	808 01	
	1,276 37	1,276 37

WIKWEMIKONG INDUSTRIAL SCHOOL, ONT.

(Roman Catholic.)

RECEIPTS.	\$ cts.	\$ cts.
Government grant, per capita.....		7,920 00
Receipts from other sources.....		3,088 27
Total receipts.....		11,008 27
EXPENDITURE.		
Salaries.....	1,615 00	
Food.....	3,956 14	
Clothing.....	2,384 48	
Buildings and repairs.....	444 53	
Fuel and light.....	1,012 11	
Equipment and furniture.....	468 75	
Miscellaneous.....	1,127 26	
	11,008 27	11,008 27

6-7 EDWARD VII., A. 1907

STATEMENT of Receipts and Expenditure for the year ended June 30, 1906—*Con.*

BRANDON INDUSTRIAL SCHOOL, MAN.

(Methodist.)

RECEIPTS.	\$ cts.	\$ cts.
Government grant, per capita, sent through Methodist Missionary Society		12,000 00
" " paid on vouchers.		2,952 39
Merchants Bank, balance, June 30, 1905.		10 40
Farm live stock		597 66
Campbell & Campbell.		0 20
Total receipts		15,560 65
EXPENDITURE.		
Carpenter's shop.	20 10	
Travelling expenses	95 65	
Games.	88 41	
Clothing	2,083 94	
Fuel.	1,078 45	
School fees	54 50	
Merchants Bank, June 30, 1906.	1 64	
Farm	332 46	
Farm equipment.	234 66	
Freight	58 49	
Light	236 54	
Office	132 58	
House expenses	340 66	
Provisions.	2,167 49	
Extra labour.	25 00	
Telegrams.	9 94	
House equipment.	332 20	
Salaries	4,674 00	
Trustee Board.	25 00	
Repairs.	89 95	
Transport of pupils.	481 95	
A. E. McKenzie & Co.	44 65	
Vouchers paid by department: Postage, \$20; drugs and medicines, \$305.03; plumbing and pump repairs, \$64.98; hardware and new furnace, \$602 28; fire-protection, \$82.40; machinery, \$135; lumber, \$650.45; horses, \$525; doctor, \$495; general hospital, \$48; dentist, \$6.50; veterinary, \$17.75 ...	2,952 39	
	15,560 65	15,560 65

* ELKHORN INDUSTRIAL SCHOOL, MAN.

(Udenominational.)

RECEIPTS.	\$ cts.	\$ cts.
Government grant	15,732 65	
Farm receipts (cash)	77 50	
" (produce)	678 75	
		16,488 90
EXPENDITURE.		
Salaries.	4,538 68	
Stock and equipment.	421 34	
Material and repairs	731 14	
Travelling expenses	602 37	
Fuel and light.	1,721 01	
Miscellaneous	367 34	
Farm	853 64	
Dry goods and clothing.	2,877 93	
Groceries and provisions.	4,237 95	
Indian Department (cash receipts)	77 50	
	16,488 90	16,488 90

* NOTE.—All expenses in connection with this school are paid by the government.

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STATEMENT of Receipts and Expenditure for the year ended June 30, 1906—*Cont.*

*RUPERT'S LAND INDUSTRIAL SCHOOL, MAN.

(Undenominational.)

<i>Maintenance.</i>		\$ cts.	\$ cts.
Clothing.....		539 35	
• Dispensary.....		516 90	
Fuel.....		684 05	
Games.....		13 78	
House expense.....		170 97	
Light.....		216 29	
Office.....		52 80	
Provisions.....		1,983 17	
School.....		7 65	
Salaries.....		3,113 88	
Travelling expenses.....		165 90	5,475 74
<i>Other Expenses.</i>			
Fixtures.....		3,582 43	
House equipment.....		6 10	
Repairs.....		550 12	
Blacksmith-shop.....		10 00	
Farm.....		229 70	
Advertising.....		3 00	
			4,381 35
Total expenditure.....			11,857 09

*NOTE.—All expenses in connection with this school are paid by the government.

BATTLEFORD INDUSTRIAL SCHOOL, SASK.

(Church of England).

RECEIPTS.		\$ cts.	\$ cts.
Government grant, per capita.....			9,834 59
" " buildings, repairs, drugs, &c.....			1,369 20
Contributions from other sources.....			1,507 00
Total receipts.....			12,710 79
EXPENDITURE.			
Deficit, June 30, 1905.....		949 38	
Salaries.....		3,876 75	
Food.....		3,768 52	
Clothing.....		905 70	
Fuel and light.....		710 96	
Buildings, repairs, drugs, &c.....		1,369 20	
Equipment and furnishing.....		410 34	
Miscellaneous.....		719 94	
		12,710 79	12,710 79

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STATEMENT of Receipts and Expenditure for the year ended June 30, 1906—*Con.*

QU'APPELLE INDUSTRIAL SCHOOL, SASK.

(Roman Catholic.)

RECEIPTS.	\$ cts.	\$ cts.
Government grant per capita, balance 1904-5		235 00
" " " for 1905-6		24,876 40
Provisions,— Board of men on new buildings		6,128 90
Government grant above per capita for medical attendance, repairs, stationery, &c.		943 37
Cash earned by shops, &c.		5,949 87
Total receipts.		38,133 54
EXPENDITURE.		
Deficit, June 30, 1905	2,332 49	
Salaries paid out of per capita grant, \$6,640.75 ..		
" " above " " \$ 750.00	7,390 75	
Food	11,034 50	
Clothing	3,347 27	
Fuel and light	1,646 61	
Building and repairs	48 06	
Equipment and furniture	1,384 90	
Miscellaneous paid out of per capita grant	11,215 03	
" " above " "	193 37	
Deficit, June 30, 1906		459 44
	38,592 98	38,592 98

REGINA INDUSTRIAL SCHOOL, SASK.

(Presbyterian.)

RECEIPTS.	\$ cts.	\$ cts.
Cash balance, June 30, 1905		180 47
Government grant, per capita		7,345 25
Proceeds of farm and shops		4,244 74
Value of clothing contributed		300 00
Miscellaneous		575 13
Total receipts		12,645 59
EXPENDITURE.		
Provisions	2,698 67	
Clothing	1,026 16	
Fuel and light	1,503 07	
House and kitchen	194 36	
Salaries	3,133 50	
Farm and shops	2,738 75	
Miscellaneous	1,110 95	
Cash balance, June 30, 1906	240 13	
	12,645 59	12,645 59

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STATEMENT of Receipts and Expenditure for the Year ended June 30, 1906—*Con.*

*CALGARY INDUSTRIAL SCHOOL, ALBERTA.

(Undenominational.)

EXPENDITURE.	\$ cts.	\$ cts.
Salaries	2,731 66	
Food	1,847 55	
Clothing	571 70	
Management	2,116 59	
Total expenditure.....		7,267 50

*NOTE.—All expenses in connection with this school are paid by the government.

RED DEER INDUSTRIAL SCHOOL, ALBERTA.

(Methodist.)

RECEIPTS.	\$ cts.
Government grant, per capita	9,648 16
" " for buildings and repairs	1,127 41
" " for medical attendance and drugs	576 46
" " for wire fencing	244 02
" " for postage and stationery	15 75
Proceeds of sales of farm stock and produce	1,439 94
Earnings of pupils and teams	103 35
Balance (mostly balance not yet due on steam threshing outfit purchased last fall)	1,307 26
Total receipts	14,462 35
EXPENDITURE.	\$ cts.
Unpaid accounts, July 1, 1905	73 43
Food	3,198 80
Clothing	723 07
Light	82 14
Buildings and repairs	1,127 41
Equipment and furniture (including \$1,500 for steam threshing outfit)	1,980 89
Salaries	4,387 99
Farm expense	127 21
Travelling expenses	596 61
Extra labour, clearing and breaking land, &c.	990 95
Miscellaneous (office, health, sports, kitchen, laundry and shops)	1,081 18
Balance on hand, or due the school	92 67
	14,462 35
	14,462 35

6-7 EDWARD VII., A. 1907

STATEMENT of Receipts and Expenditure for the year ended June 30, 1906—*Con.*

ST. JOSEPH'S INDUSTRIAL SCHOOL, ALBERTA.

(Roman Catholic.)

RECEIPTS.	\$ cts.	\$ cts.
Cash on hand, June 30, 1905.....		546 49
Government grant due for June, 1905.....		1,192 10
" 1905-1906.....		9,743 46
" for buildings and repairs.....		875 00
" for fire appliance.....		28 80
" for damaged flour.....		700 00
Farm produce and live stock sold.....		2,575 03
Total receipts.....		15,660 88
EXPENDITURE.		
On unpaid accounts, June 30, 1905.....	2,613 50	
Salaries.....	4,872 80	
Food.....	3,301 42	
Clothing.....	902 96	
Fuel and light.....	807 49	
Farm.....	1,287 14	
Live stock.....	915 60	
Buildings and repairs.....	958 87	
Miscellaneous.....	1,247 84	
Total expenditure.....	16,907 62	
Excess of expenditure over receipts.....		1,246 74
	16,907 62	16,907 62

ALERT BAY INDUSTRIAL SCHOOL, B. C.

(Church of England.)

RECEIPTS.	\$ cts.	\$ cts.
Government grant, per capita.....		3,611 81
C. M. S. grant.....		480 00
Shop.....		18 50
Board.....		42 00
Total receipts.....		4,152 31
EXPENDITURE.		
Deficit, June 30, 1905.....	194 46	
Salaries.....	1,189 00	
Food.....	1,801 50	
Clothing.....	495 70	
Fuel and light.....	198 25	
Equipment.....	181 70	
Repairs.....	32 50	
Miscellaneous.....	99 88	
Total expenditure.....	4,192 99	
Excess of expenditure over receipts.....		40 68
	4,192 99	4,192 99

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STATEMENT of Receipts and Expenditure for the Year ended June 30, 1906—*Con.*

CLAYQUOT (CHRISTIE) INDUSTRIAL SCHOOL, B. C.

(Roman Catholic.)

RECEIPTS.	\$ cts.	\$ cts.
Government grant, per capita.....		6,500 00
Contributions from private sources.....		1,354 05
Government grant, for hot-water heating plant.....		1,500 00
Receipts from sewing-room and laundry work.....		47 85
Total receipts.....		9,401 90
EXPENDITURE.		
Deficit, June 30, 1905.....	1,352 97	
Salaries.....	2,425 25	
Food.....	2,320 02	
Clothing.....	557 75	
Fuel and light.....	136 15	
Buildings and repairs.....	1,846 16	
Hot-water heating plant.....	2,693 00	
Plumbing.....	1,268 75	
Equipment and furniture.....	828 78	
Miscellaneous.....	289 89	
Total expenditure.....	13,718 70	
Excess of expenditure over receipts.....		4,316 80
	13,718 70	13,718 70

COQUALEETZA INDUSTRIAL SCHOOL, B. C.

(Methodist.)

RECEIPTS.	\$ cts.	\$ cts.
Government grant, per capita.....		7,650 90
" " for principal's residence.....		1,500 00
Contributions from other sources.....		4,261 59
Total receipts.....		13,412 49
EXPENDITURE.		
Deficit, June 30, 1905.....	195 40	
Salaries.....	3,513 80	
Food.....	2,923 90	
Clothing.....	1,395 84	
Fuel and light.....	645 82	
Buildings and repairs.....	2,465 79	
Equipment (no government grant towards this).....	1,244 25	
Miscellaneous.....	881 97	
Total expenditure.....	13,206 77	
Balance on hand, June 30, 1906.....	145 72	
	13,412 49	13,412 49

6-7 EDWARD VII., A. 1907

STATEMENT of Receipts and Expenditure for the Year ended June 30, 1906—*Con.*

KAMLOOPS INDUSTRIAL SCHOOL, B.C.

(Roman Catholic.)

RECEIPTS.	\$ cts.	\$ cts.
Balance on hand, June 30, 1905.....		61 20
Government grant, per capita.....		6,500 00
" " for windmill and fixtures.....		246 50
From sales of farm produce.....		52 18
From other sources.....		41 20
Total receipts.....		6,901 08
EXPENDITURE.		
Salaries.....	2,760 00	
Food.....	1,743 92	
Clothing.....	721 58	
Fuel and light.....	390 10	
Buildings and repairs.....	87 37	
Equipment and furniture, paid by school.....	548 34	
Windmill and fixtures, paid by department.....	246 50	
Miscellaneous.....	290 19	
Total expenditure.....	6,788 00	
Balance on hand, June 30, 1906.....	113 08	
	6,901 08	6,901 08

KOOTENAY INDUSTRIAL SCHOOL, B.C.

(Roman Catholic.)

RECEIPTS.	\$ cts.	\$ cts.
Government grant, per capita.....		6,500 00
EXPENDITURE.		
Deficit, June 30, 1906.....	720 37	
Salaries.....	300 00	
Foreman.....	657 00	
Carpenter.....	301 00	
Food.....	1,814 00	
Clothing.....	1,665 00	
Fuel and light.....	35 00	
Buildings and repairs.....	1,198 00	
Miscellaneous.....	968 00	
Total expenditure.....	7,658 37	
Excess of expenditure over receipts.....		1,158 00
	7,658 37	7,658 37

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STATEMENT of Receipts and Expenditure for the year ended June 30, 1906—*Con.*

KUPER ISLAND INDUSTRIAL SCHOOL, B.C.

(Roman Catholic.)

RECEIPTS.		\$	cts.	\$	cts.
Government grant, per capita.....				6,500	00
" " aid to water system.....				167	29
From other sources.....				675	71
Total receipts.....				7,343	00
EXPENDITURE.					
Deficit, June 30, 1905.....				170	68
Salaries.....				2,870	00
Food (farm produce not included).....				1,587	24
Clothing.....				1,352	31
Fuel and light.....				169	55
Buildings and repairs.....				490	99
Equipment and furniture (paid by school).....				646	94
Miscellaneous.....				231	42
Total expenditure.....				7,519	13
Excess of expenditure over receipts.....					176 13
				7,519 13	7,519 13

LYTTON INDUSTRIAL SCHOOL, B.C.

(Church of England.)

RECEIPTS.		\$	cts.	\$	cts.
Government grant, per capita.....				2,821	00
From New England Company.....				1,692	50
From sales, &c.....				1,106	68
Total receipts.....				5,620	18
EXPENDITURE.					
Provisions.....				1,019	04
Clothing.....				656	25
Hardware.....				106	55
Furniture.....				162	86
Light and fuel.....				339	30
Laundry.....				32	20
Freight, &c.....				148	09
Salaries.....				2,413	62
Postage, &c.....				12	53
Implements.....				167	35
Blacksmith shop.....				5	30
Fruit boxes.....				121	30
Drugs and medical attendance.....				224	78
Seeds, \$49.90; repairs, \$1.25.....				51	15
Lumber, \$505.41; school supplies, \$65.45.....				570	86
Farm labour.....				1,020	65
Customs, \$32.50; travelling expenses, \$60.10.....				92	60
Insurance, \$30; sundries, \$13.05.....				43	05
Blacksmithing, \$36.30; threshing, \$89.....				125	30
Total expenditure.....				7,312	56
Excess of expenditure over receipts (paid by New England Company).....					1,692 38
				7,312 56	7,312 56

6-7 EDWARD VII., A. 1907

STATEMENT of Receipts and Expenditure for the year ended June 30, 1906—*Con.*

METLAKAHTLA INDUSTRIAL SCHOOL, B.C.

(Church of England.)

RECEIPTS.		\$	cts.	\$	cts.
Government grant, per capita				6,520	88
Board				46	50
Work done by instructor and pupils				45	50
Rent for post office				15	00
Church of England for travelling expenses of 4 employees, from the east to Metlakahla				257	55
Government grant, special, to build platform				61	96
Total receipts				6,947	39
EXPENDITURE.					
Deficit, June 30, 1905		886	65		
Salaries		1,789	12		
Several persons for laundry and other work		339	50		
Food		2,437	03		
Clothing		829	20		
Fuel and light		515	50		
Buildings and repairs		54	55		
Furniture and equipment		106	49		
Miscellaneous, including freight		552	20		
Travelling expenses paid by the church		257	55		
Cost of building platform		61	96		
Pump, hose, etc.		87	00		
Total expenditure		7,916	75		
Excess of expenditure over receipts				969	36
		7,916	75	7,916	75

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WILLIAMS LAKE INDUSTRIAL SCHOOL, B.C.

(Roman Catholic.)

RECEIPTS.		\$	cts.	\$	cts.
Government grant, per capita.....				5,870	54
Amount contributed by way of clothing				25	00
Total receipts.....				5,895	54
EXPENDITURE.					
Deficit, June 30, 1905.....		3,204	22		
Interest on \$3,000 loan		150	00		
Salaries.....		2,235	00		
Food.....		2,746	00		
Clothing		619	74		
Fuel and light.....		80	00		
Buildings and repairs		20	00		
Equipment and furniture.....		170	72		
Miscellaneous.....		47	30		
Total expenditure.....		9,272	98		
Excess of expenditure over receipts				3,377	44
				9,272,98	9,272 98

6-7 EDWARD VII., A. 1907

SCHOOL

STATEMENT of Day Schools in the Dominion (from which Returns

School.	Reserve.	Agency.	Teacher.	Denomination.
ONTARIO.				
Albany Mission (C. E.)...	At Fort Albany...	In Treaty No. 9...	Miss Mary F. Johnson	Church of England
" (R. C.)...	" "	" No. 9...	Rev. Sister St. Felix	Roman Catholic..
Alnwick	Alnwick	Alnwick	Fred. G. Joblin...	Methodist.....
Back Settlement.....	Caradoc	Caradoc.....	Lyman W. Fisher..	Udenominational
Bear Creek	"	"	Miss Nettie E. Lockwood	"
Cape Croker.....	Cape Croker.....	Cape Croker	Miss Mary Moffitt..	"
Christian Island..	Christian Island..	Penetanguishene..	Rev. John Wilson, BA	Methodist.....
Fort William (Boys)...	Fort William.....	Port Arthur.....	Sister M. Ambrose..	Roman Catholic..
" (Girls).....	"	"	"	"
French Bay.....	Saugeen	Saugeen	T. J. Wallace	Udenominational
Garden River (R. C.)...	Garden River.....	Sault Ste. Marie..	Rev. J. A. Drolet, S.J.	Roman Catholic..
" (C. E.)	"	"	Lucius F. Hardyman	Church of England
*Garden Village.....	Nipissing.....	Sturgeon Falls..	F. LeTonturier.....	Roman Catholic..
Georgina Island.....	Georgina Island..	Georgina Island..	J. H. Prosser.....	Methodist.....
Gibson	Watha	Parry Sound	Thomas Whitebeans.	"
Golden Lake.....	Golden Lake.....	Golden Lake.....	Miss Charlotte Casey	Roman Catholic..
Goulais Bay.....	Goulais Bay.....	Sault Ste. Marie..	Thomas Cadreau....	"
Henvey Inlet.....	Henvey Inlet.....	Parry Sound.....	W. Jones.....	Udenominational
†Hiawatha.....	Rice Lake.....	Rice Lake.....	Miss Agnes Doris..	"
Kettle Point.....	Kettle Point.....	Sarnia	" Maud M. Erb	"
Lake Helen.....	Red Rock	Port Arthur	" Alice Barker.....	Roman Catholic..
‡Long Lake.....	Long Lake.....	"	" Eliz. Finlayson ..	"
Mattawa	At Mattawa.....	"	Sister St. Gregory..	"
Michipicoten.....	Michipicoten.....	Sault Ste. Marie..	Miss Kate O'Connor	"
¶Missinaibi.....	At Missinaibi	"	E. A. Atkinson.....	Udenominational
Moraviantown.....	Moravian	Moravian.....	Miss Car. Mummery	"
Moose Fort.....	At Moose Factory.	In Treaty No. 9..	Ernest Oxley.....	Church of England
Mud Lake.....	Mud Lake.....	Rice Lake.....	Alfred McCue.....	Udenominational
Muncey	Caradoc	Caradoc.....	John L. Case.....	Church of England
§Naughton.....	Whitefish Lake..	Manitowaning...	J. A. Windsor.....	Methodist.....
New Credit.....	New Credit.....	New Credit.....	Miss L. Mitchell..	Udenominational
Nipissing.....	Nipissing.....	Sturgeon Falls..	" Alma Piché.....	"
Oneida No. 2.....	Oneida.....	Caradoc	Levi Williams.....	Church of England
" No. 3.....	"	"	Mrs. C. A. Vollick..	Methodist.....
Pic River.....	Pic River.....	Port Arthur	J. A. Blais.....	Roman Catholic..
Port Elgin.....	Cape Croker	Cape Croker	Miss Irene E. Nelson	Udenominational
Rama	Rama	Rama	Rev. John Lawrence	Methodist.....
River Settlement	Caradoc	Caradoc	Joseph Fisher.....	Udenominational
Riverson.....	Parry Island.....	Parry Sound	Miss J. E. Armour..	"
Sagamook.....	Spanish River	Thessalon.....	" Eliz. A. Lensch ..	Roman Catholic..
Saugeen	Saugeen.....	Saugeen	" Helen Ruxton	Udenominational
Scotch Settlement.....	"	"	John Burr.....	"

* New school. Opened January 3, 1906. † Indian children attend white school. ‡ New school, Opened June 1, 1905. ¶ Indian children attend white school. Department pays 50 cents per month (per capita) on average attendance. § Closed September 30, 1905.

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STATEMENT.

have been received) for the Year ended June 30, 1906.

Appropriation for Salary or yearly grant.	From what Fund paid.	NUMBER ON ROLL.			Average Attendance.	STANDARD.						School.
		Boys.	Girls.	Total.		I	II	III	IV	V	VI	
\$ cts.												ONTARIO.
200 00	Vote.....	21	26	47	21	39	5	3				Albany Mission (C. E.)
300 00	".....	15	16	31	20	18	11	2				(R. C.)
300 00	Band.....	17	13	30	17	14	6	4	4	2		Alnwick.
300 00	Band, \$200; Vote, \$100	11	9	20	8	11	4		5			Back Settlement.
300 00	Band, \$200; Vote, \$100	17	4	21	6	15	3	2	1			Bear Creek.
300 00	Band.....	22	11	33	25	9	10	7	5	2		Cape Croker.
300 00	".....	21	24	45	18	23	15	6	1			Christian Island.
600 00	Vote.....	12		12	5	6	2	4				Fort William (Boys).
300 00	".....		20	20	9	9	5	6				(Girls).
350 00	Band.....	17	12	29	21	18	8	1	2			French Bay.
600 00	Band, \$300; Vote, \$300	33	33	66	30	37	14	8	7			Garden River (R. C.)
350 00	Band.....	14	12	26	12	8	6	12				(C. E.)
300 00	".....	12	12	24	22	24						*Garden Village.
300 00	Band, \$150; Vote, \$150	11	8	19	8	9		6	4			Georgina Island.
300 00	Vote.....	6	15	21	10	13	4	2		2		Gibson.
300 00	".....	12	10	22	11	11	6		5			Golden Lake.
300 00	".....	9	16	25	13	14	11					Goulais Bay.
300 00	Band, \$100; Vote, \$200	4	13	17	7	11	5		1			Henvey Inlet.
100 00	Band.....	2	7	9	7	4	2	1		2		†Hiawatha.
300 00	".....	6	10	16	7	10	3	3				Kettle Point.
300 00	Vote.....	13	12	25	6	21	4					Lake Helen.
300 00	".....	26	26	52	16	49	3					‡Long Lake.
100 00	".....	12	23	35	28	16	8	9	2			Mattawa.
300 00	".....	7	5	12	7	4	4	1	3			Michipicoten.
	".....	20	19	39	30	10	23	6				Mission.
400 00	Band.....	25	26	51	27	13	18	16		4		Moraviantown.
200 00	Vote.....	28	22	50	36	30		16				Moose Fort.
300 00	Band.....	16	9	25	14	8	5	9	3			Mud Lake.
300 00	Vote.....	12	12	24	9	15	1	6	1	1		Muncey.
300 00	".....	3	4	7	3	2	1	2		2		*Nottawasaga.
300 00	Band.....	19	16	35	14	11	5	4	12	3		New Credit.
300 00	".....	9	13	22	13	8	2	8	3			Nipissing.
300 00	Vote.....	15	13	28	16	25	1	2				Oneida No. 2.
300 00	".....	21	9	30	20	20	7	1	2			No. 3.
300 00	".....	17	7	24	10	12	12					Pic River.
300 00	Band.....	18	9	27	12	14	6	2	1	4		Port Elgin.
300 00	Band, \$125; Vote, \$175	16	26	42	18	18	5	6	6	5	2	Ramsay.
300 00	Band.....	10	13	23	10	13	6	1	3			River Settlement.
300 00	".....	16	13	29	12	13	7	9				Ryerson.
300 00	Vote.....	13	9	22	16	6	7	8	1			S. Williams.
350 00	Band.....	9	12	21	12	10	4	4	3			Saugen.
350 00	".....	10	13	23	15	7	5	5	6			Scotch Settlement.

6-7 EDWARD VII., A. 1907

SCHOOL

STATEMENT of Day Schools in the Dominion (from which

School.	Reserve.	Agency.	Teacher.	Denomination.
ONTARIO— <i>Concluded.</i>				
*Scugog	Scugog Island ..	Scugog.	Miss Maude Young.	Undenominational
Serpent River.	Serpent River.	Thessalon.	Mrs. J. H. McKay. .	Roman Catholic. .
Shawanaga	Shawanaga.	Parry Sound.	Miss L. McLellan. .	Undenominational
Sheguiandah	Sheguiandah.	Manitowaning.	F. W. Major.	Church of England
Sheshegwaning	Sheshegwaning.	Gore Bay.	Miss Adèle Duhamel	Roman Catholic. .
Sidney Bay	Cape Croker	Cape Croker	Miss Isabella McIver	Undenominational
Six Nations No. 1.	Six Nations.	Six Nations.	D. M. Hubbard.	" ..
" No. 2.	"	"	Jno. Clark (Principal)	" ..
" No. 3.	"	"	Asa Hill, (Ass't.)...	" ..
" No. 5.	"	"	Miss Mabel F. Styres	" ..
" No. 6.	"	"	John Lickers.	" ..
" No. 7.	"	"	E. D. Bearfoot.	" ..
" No. 9.	"	"	Edward C. Davis.	" ..
" No. 10.	"	"	Miss Rosa B. Russell	" ..
" No. 11.	"	"	Miss Sara Davis.	" ..
"	"	"	Thos. W. Draper.	" ..
Skene.	Parry Island.	Parry Sound.	Mrs. A. E. McKelvie	" ..
South Bay.	South Bay.	Manitowaning.	Miss Zoë St. James. .	Roman Catholic. .
†Spanish River.	Spanish River	Thessalon.	William H. Trickett.	Church of England
St. Clair	Sarnia	Sarnia	Mrs. M. L. Maxwell.	Methodist.
Sucker Creek	Sucker Creek.	Manitowaning.	Miss Ida H. Ferguson	Church of England
‡Temogami	On Bear Island.	Sturgeon Falls.	Miss Emm C. Doherty	Undenominational
Thomas	Six Nations.	Six Nations.	John Miller.	" ..
||Tyendinaga (Eastern). .	Tyendinaga.	Tyendinaga.	Miss Frs. Alexander.	" ..
" (Western).	"	"	" Susan Brant.	" ..
" (Central).	"	"	" Bertha L. Cook.	" ..
" (Mission).	"	"	" J. W. Singleton.	" ..
§Walpole Island, No. 1. .	Walpole Island.	Walpole Island.	" G. Aylsworth.	Church of England
" No. 2.	"	"	Joseph Sampson.	Methodist.
West Bay	West Bay.	Gore Bay.	Miss Anna R. Peacock	Roman Catholic. .
Whitefish Lake	Whitefish Lake.	Manitowaning.	" R. A. Dunne.	" ..
" River.	" River.	"	John C. Ross.	Church of England
Wikwemikong (Boys). .	Wikwemikong (un-	"	John Gorman.	Roman Catholic. .
" (Girls).	ceded.	"	Miss Emily Frawley.	" ..
Wikwemikongsing.	Wikwemikongsing	"	" Rose Fagan.	" ..
Total, Ontario.				

* Indian children attend white school. Department pays 50 cents per month (per capita) on average attendance. † Reopened May 28, 1906, having been closed from June 30, 1904. ‡ Open during the summer only. § Closed during September and December quarters, 1905. § Closed September quarter, 1905.

SESSIONAL PAPER No. 27

STATEMENT—Continued.

Returns have been received) for the Year ended June 30, 1906.

Appropriation for Salary or yearly grant.	From what Fund Paid.	NUMBER ON ROLL.			Average attendance.	STANDARD.						School.
		Boys.	Girls.	Total.		I	II	III	IV	V	VI	
% cts.												ONTARIO—Continued.
300 00	Band.....	10	5	15	4	13	2					Scugog.
300 00	Vote.....	8	7	15	9	2	5	8				Serpent River.
300 00	Band, \$100; Vote \$200	10	8	18	7	13	4		1			Shawanaga.
300 00	Band.....	12	7	20	9	14	6					Shesguindah..
300 00	"	13	12	25	15	14	4	5	2			Shesheganing.
300 00	"	6	4	10	6	2	5		2	1		Sidney Bay.
300 00	"	28	16	44	16	19	13	7	3	2		Six Nations No. 1.
	"	51	57	108	44	39	14	21	20	14		" No. 2.
	"	33	38	71	23	36	17	12	2	4		" No. 3.
4,250 00	Band, \$3,800; Vote, \$450.....	23	22	45	17	16	10	5	6	6	2	" No. 5.
	"	15	13	28	10	9	9	3	6		1	" No. 6.
	"	42	48	90	23	36	23	20	8	3		" No. 7.
	"	19	21	40	19	19	6	10	5			" No. 9.
	"	31	34	65	17	33	16	6	8	2		" No. 10.
	"	18	18	36	14	17	4	6	3	6		" No. 11.
300 00	Band, \$150; Vote \$150	5	3	8	5	5			3			Skene.
300 00	" \$200; Vote \$100	15	13	28	19	10	11			3		South Bay.
300 00	Vote.....	8	5	13	6	13						Spanish River.
300 00	Band.....	18	18	36	20	23	8	3	2			St. Clair.
300 00	Vote.....	4	6	10	6	3	7					Sucker Creek.
150 00	"	8	13	21	12	10	7	3	1			Temogami.
350 00	Band.....	26	37	63	29	26	16	10	3	8		Thomas.
150 00	"	37	15	52	30	36	7	7	2			Tyendinaga (Eastern).
250 00	"	16	11	27	14	12	9	2	3	1		" (Western).
150 00	"	16	18	34	16	17	13	3	1			" (Central).
225 00	"	17	14	31	12	18	5	6	1	1		" (Mission).
300 00	Band, \$200; Vote \$100	15	33	48	18	34	5	4	5			\$ Walpole Island No. 1.
300 00	Vote.....	25	20	45	24	28	3	11	2	1		" No. 2.
300 00	Band.....	13	27	40	18	22	6	7	5			West Bay.
300 00	"	5	10	15	11	6	6	3				Whitfish Lake.
300 00	Vote.....	5	2	7	3	4	3					" River.
300 00	"	34		34	10	34						Wikwemikong (Boys).
300 00	"		26	26	12	18	4	1	1	2		" (Girls).
300 00	"	15	9	24	12	14	6	4				Wikwemikongsing.
		1198	1173	2371	1131	1243	508	353	176	81	10	Total, Ontario.

6-7 EDWARD VII., A. 1907

SCHOOL

STATEMENT of Day Schools in the Dominion (from which Returns

School.	Reserve.	Agency.	Teacher.	Denomination.
QUEBEC.				
Bersimis	Bersimis	Bersimis	Sr. Marie du Carmel.	Roman Catholic...
Caughnawaga (Boys)....	Caughnawaga....	Caughnawaga ..	Peter J. DeLisle Princ	" " ..
			Peter Williams, Asst.	" " ..
			Miss M. E. Howlett,	" " ..
			Principal	" " ..
" (Girls)	"	"	Mme. A. Beauvais,	" " ..
			Asst.	" " ..
" (mission) ..	"	"	A. M. Demers.....	Methodist.
Congo Bridge.....	Maniwaki.....	Maniwaki	Miss Nora McCaffrey	Undenominational
Cornwall Island.....	St. Regis.....	St. Regis.....	David A. Benedict..	" ..
Escoumains	at Escoumains...	Bersimis	Joseph L. Otis.....	Roman Catholic...
			Sister St. Adelaide,	" ..
Lorette	Lorette	Lorette	Princ	" ..
			Sister St. Augustine,	" ..
			Asst	" ..
Maniwaki.....	Maniwaki	Maniwaki.....	Miss Annie O'Connor	" " ..
Maria	Maria	Maria	" Margaret Issac,	" " ..
Oka (Country) ..	Oka	Oka	" Emilie Sever,..	Methodist.....
" (Village) ..	"	"	" E. M. Young,..	" ..
Pointe Bleue	Pointe Bleue...	Pointe Bleue...	Mrs. Joseph Cleary..	Roman Catholic...
Restigouche	Restigouche...	Restigouche...	Sister Mary of the	" ..
			Holy Rosary.....	" ..
St. Francis (Prot)....	Pierreville	Pierreville.....	Samuel J. Boyce...	Church of England
			Sister Mary Jose-	" ..
" (R. C.) ..	"	"	phine, Princ ..	Roman Catholic...
St. Regis.....	St. Regis.....	St. Regis.....	Sr. St. Elnire, Asst..	" ..
Timiskaming	Témiskaming....	Témiskaming....	Miss Lena Gilhooly..	Undenominational
			Sister Mary Aimée..	Roman Catholic...
Total, Quebec.....				
NOVA SCOTIA.				
Bear River.....	Bear River..	Digby County ...	Miss Laura W. Bar-	Roman Catholic. .
			teaux.....	" ..
†Eskasoni.....	Eskasoni.....	Cape Breton Co	J. F. Beaton	" " ..
‡Half-way River....	Franklin Manor..	Cumberland ..	Miss Margaret L.	" ..
			Kent.....	" ..
Indian Cove.....	Fisher's Grant...	Pictou ..	Miss Cassie McDon-	" ..
			ald	" ..
Middle River.....	Midle River...	Victoria ..	Daniel Buckles.....	" ..
Millbrook	Millbrook	Colchester ..	Miss Jessie Scott...	" ..
New Germany.....	Lunenburg	Lunenburg ..	" Belle B. Hawks-	" ..
			worth	" ..
Salmon River.....	Salmon River....	Richmond ..	Miss Sara E. O'Toole	" " ..
§Shubenacadie.....	Indian Brook	Hants ..	Robert J. Logan....	" " ..
Sydney	Sydney	Cape Breton ..	Mrs. Jessie A. Fynn,	" " ..
Whycocomagh.....	Whycocomagh...	Inverness ..	Donald J. Gillis....	" " ..
Total, Nova Scotia.....				

*Indian children attend white school. Department pays 25 cents per month (per capita) on average attendance. †Closed December quarter, 1905. No teacher. ‡Indian children attend white school. § Closed June 29, 1906, on account poor attendance.

SESSIONAL PAPER No. 27

STATEMENT—Continued,

have been received) for the Year ended June 30, 1906.

Appropriation for Salary or Yearly Grant.	From what Fund paid.	NUMBER ON ROLL.			Average Attendance.	STANDARD.						School.
		Boys.	Girls.	Total.		I	II	III	IV	V	VI	
¢												QUEBEC.
300 00	Vote	17	25	42	23	16	6	12	8	...	...	Bersimis.
450 00	"	105	...	105	49	81	11	10	3	...	...	Caughnawaga (boys).
300 00	"	...	78	78	44	39	11	9	9	6	4	" (girls).
250 00	"	26	18	44	16	35	4	2	3	...	...	" (mission).
250 00	"	15	34	49	18	25	11	11	2	...	...	Congo Bridge.
300 00	"	24	23	47	10	41	3	2	1	...	...	Cornwall Island.
350 00	"	4	8	12	11	...	2	4	3	3	...	*Escoumains.
150 00	"	28	27	55	40	24	9	15	7	...	...	Lorette.
150 00	"	5	20	25	8	16	4	3	2	...	...	Maniwaki.
300 00	Band	12	10	22	14	11	5	1	3	1	1	Maria.
300 00	Vote	8	10	18	7	10	2	2	4	...	...	Oka (Country).
125 00	"	13	6	19	9	6	2	5	4	2	...	" (Village).
125 00	"	14	19	33	19	13	16	4	...	...	...	Pointe Bleue.
300 00	"	28	35	63	36	36	16	7	...	4	...	Restigouche.
300 00	"	7	8	15	12	4	5	6	...	...	...	St. Francis (Prot.)
300 00	"	41	33	74	55	30	6	22	10	5	1	(R.C.).
250 00	"	27	14	41	7	35	3	3	...	...	...	St. Remy.
350 00	"	23	17	40	22	17	6	15	2	...	...	Timiskaming.
300 00	"	397	385	782	400	439	122	133	61	21	6	Total, Quebec.
...												NOVA SCOTIA.
300 00	Vote	12	9	21	6	10	2	4	3	1	1	Bear River.
300 00	"	13	8	21	8	11	1	6	...	...	...	†Eskasoni.
100 00	"	1	2	3	1	1	2	...	...	...	...	‡Half-way River.
300 00	"	15	6	21	11	10	4	3	2	2	...	Indian Cove.
300 00	"	6	6	12	5	6	3	1	1	1	...	Middle River.
300 00	"	13	9	22	10	3	1	8	6	...	...	1 Millbrook.
300 00	"	5	9	14	6	3	1	1	...	5	...	4 New Germany.
300 00	"	13	14	27	8	16	9	2	...	...	...	Salmon River.
300 00	"	8	1	12	2	6	3	1	1	...	...	1 Shubenacadie.
300 00	"	15	7	22	12	8	5	5	4	...	...	Sydney.
300 00	"	13	13	26	9	19	6	1	...	...	...	Whycocomagh.
...		114	87	201	78	93	43	32	17	9	7	Total, Nova Scotia.

6-7 EDWARD VII., A. 1907

SCHOOL

STATEMENT of Day Schools in the Dominion (from which

School.	Reserve.	Agency.	Teacher.	Denomination.
NEW BRUNSWICK.				
Burnt Church.....	Church Point.....	Northeastern.....	Miss Mary E. Keating	Roman Catholic...
Big Cove.....	Big Cove.....	".....	" Mary Isaac....	".....
Eel Ground.....	Eel Ground.....	".....	" Lucy B. Walsh.	".....
Kingsclear.....	Kingsclear.....	Western.....	" Mary Monagh'n	".....
St. Mary's.....	St. Mary's.....	".....	" M. J. Rush....	".....
Tobique.....	Tobique.....	".....	" E. H. Costigan.	".....
Total, New Brunswick.				
PRINCE EDWARD ISLAND.				
Lennox Island.....	Lennox Island.....	P. E. I. Superintendency.	Florentine Peters...	Roman Catholic...
BRITISH COLUMBIA.				
Aiyansh.....	Kitladamicks.....	Northwest Coast..	Rev. J. B. McCullagh	Church of England
Alert Bay.....	Nimkish.....	Kwakwewlth.....	Miss Emily Richards	".....
Bella Bella.....	Bella Bella.....	".....	" Mary A. Beatty.	Methodist.....
Bella Coola.....	Bella Coola.....	Northwest Coast..	" Viola M. Lawson	".....
Cape Mudge.....	Cape Mudge.....	Kwakwewlth.....	Rev. J. E. Rendle..	".....
Clayoquot (R.C.)	Opitsat.....	West Coast.....	" C. Moser, O.S.B.	Roman Catholic...
" (Prot.).....	".....	".....	" W. J. Stone....	Methodist.....
Gitwingak.....	Kitwingar.....	Babine.....	" Alfred E. Price.	Church of England
Glen Vowell.....	Sicedach.....	".....	J. P. Thorkildson...	Salvation Army...
Gwayasdums.....	Gwayasdums.....	Kwakwewlth.....	Herbert Pearson...	Church of England
* Hartley Bay.....	Hartley Bay.....	Northwest Coast..	Rev. George Read..	Methodist.....
+ Hazelton.....	Giatamaksh.....	Babine.....	Miss E. J. Stoal...	Church of England
Kincolith.....	Kincolith.....	Northwest Coast..	Rev. W. H. Collison	".....
Kita-maat.....	Kita-maat.....	".....	Dr. D. Bower.....	Methodist.....
Kitkahtla.....	Kitkahtla.....	".....	Rev. R. W. Gurd...	Church of England
* Kishitax.....	Kishitax.....	Babine.....	" W. H. Pierce....	Methodist.....
+ Kisgegas.....	Kisgegas.....	".....	Joshua J. Harvey...	Church of England
Kyaquot.....	Kyaquot.....	West Coast.....	Rev. E. Sobry.....	Roman Catholic...
Lakalsap.....	Lakalsap.....	Northwest Coast..	" J. B. McCullagh	Church of England
Massett.....	Massett.....	".....	" W. E. Collison..	".....
Metlakahla.....	Metlakahla.....	".....	Miss Helena Jackson	".....
Nanaimo.....	Nanaimo.....	Cowichan.....	Rev. W. J. Knott...	Methodist.....
New Town.....	Kitselas.....	Northwest Coast..	Simon Ellis.....	".....
* Nitanit.....	Clayoquot.....	West Coast.....	C. A. Dockstader...	".....
Ohiat (Dodger's Cove).	Haines Island.....	".....	John T. Ross.....	Presbyterian.....

* Closed during September quarter, 1905. + Re-opened September 1, 1905, having been closed since June 30, 1901. † New school opened during the December quarter, 1905. || No return received for the December quarter, 1905.

SESSIONAL PAPER No. 27

STATEMENT—Continued.

Returns have been received) for the Year ended June 30, 1906.

Appropriation for Salary or yearly grant.	From what Fund Paid.	NUMBER ON ROLL.			Average Attendance.	STANDARD.						School.
		Boys.	Girls.	Total.		I	II	III	IV	V	VI	
\$ cts.												NEW BRUNSWICK.
300 00	Vote.....	17	7	24	10	4	6	6	5	3	...	Burnt Church.
300 00	".....	14	20	34	17	14	4	5	8	2	1	Big Cove.
300 00	".....	7	10	17	10	6	4	2	4	1	...	Eel Ground.
300 00	".....	9	11	20	14	7	3	4	4	1	1	Kingsclear.
300 00	".....	17	12	29	19	6	9	10	2	2	...	St. Mary's.
300 00	".....	10	9	19	11	7	2	7	3	...	...	Tobique.
.....	.....	74	69	143	81	44	28	34	26	9	2	Total, New Brunswick.
PRINCE EDWARD ISLAND.												
300 00	Vote.....	8	14	22	10	6	1	...	11	4	...	Lennox Island.
BRITISH COLUMBIA.												
300 00	Vote.....	18	8	26	12	19	2	1	2	2	...	Aiyansh.
300 00	".....	19	21	40	17	17	16	2	3	...	2	Alert Bay.
300 00	".....	24	25	49	11	22	14	7	6	...	...	Bella Bella.
300 00	".....	31	12	43	8	38	3	2	...	...	...	Bella Coola.
300 00	".....	11	4	15	8	7	7	1	...	...	...	Cape Mudge.
300 00	".....	9	7	16	5	13	3	...	...	...	...	Clayoquot (R.C.).
.....	.....	14	11	25	12	20	5	...	...	...	...	* " (Prot.).
300 00	Vote.....	11	21	32	16	22	6	4	...	...	...	Gitwingak.
300 00	".....	14	17	31	20	22	1	6	2	...	...	Glen Vowell.
300 00	".....	16	13	29	10	25	4	...	...	...	...	Gwayasdums.
300 00	".....	12	5	17	8	14	1	2	...	...	...	* Hartley Bay.
300 00	".....	23	13	36	13	22	11	3	...	...	...	† Hazelton.
300 00	".....	25	23	48	23	19	15	7	7	...	...	Kincolith.
300 00	".....	25	31	56	32	37	4	14	1	...	...	Kite-maat.
300 00	".....	25	16	41	18	9	11	8	7	6	...	Kitkahtla.
300 00	".....	9	16	25	13	22	3	...	...	...	...	Kishnax.
300 00	".....	16	11	27	7	23	4	...	...	...	...	† Kisloga.
300 00	".....	9	2	11	6	8	1	2	...	...	...	Kyaquot.
300 00	".....	13	12	25	10	23	2	...	...	...	...	Lakalsap.
300 00	".....	20	23	43	18	19	17	7	...	...	...	Massett.
300 00	".....	15	15	30	10	19	8	1	2	...	...	Metlakahtla.
300 00	".....	10	13	23	8	14	8	1	...	...	...	Namima.
.....	.....	6	5	11	5	5	4	...	2	...	...	New Town.
300 00	Vote.....	12	11	23	8	17	4	1	1	...	...	* Nitanit.
300 00	".....	15	9	24	13	17	5	2	...	...	...	Ohiaht (Doeiger's Cove).

6-7 EDWARD VII., A. 1907

SCHOOL

STATEMENT of Day Schools in the Dominion (from which

School.	Reserve.	Agency.	Teacher.	Denomination.
BRITISH COLUMBIA— <i>Continued.</i>				
Port Essington.....	Skeena.....	Northwest Coast.	Miss Kate Tranter..	Methodist.....
Port Simpson.....	At Port Simpson..	" "	Miss Emily B. Butch- art.....	" "
Quamichan.....	Quamichan.....	Cowichan.....	Miss C. Ordano.....	Roman Catholic..
Saanich.....	Saanich.....	" "	William Thompson..	" "
Skidegate.....	Queen Charlotte Island.....	Northwest Coast.	Peter R. Kelly.....	Methodist.....
Somenos.....	Somenos.....	Cowichan.....	Rev. E. M. Scheelan	Roman Catholic..
Songhees.....	Songhees.....	" "	Sr. Mary Joseph.....	" "
Tsartlip.....	Tsartlip.....	" "	Miss Kath. Needham	" "
Ucluelet.....	Itedse.....	West Coast.....	Mrs. M. Swartout..	Presbyterian.....
Yuquot.....	Yuquot.....	" "	Rev. Alois S. Stern.	Roman Catholic..
Total, British Columbia.....				
MANITOBA.				
*Berens River.....	Berens River.....	Norway House.....	Miss Louie A. Show- ler.....	Methodist.....
Big Eddy.....	Pas.....	Pas.....	John Whitehead.....	Church of England
Black River.....	Black River.....	Norway House.....	George Slater.....	" "
Brokenhead.....	Brokenhead.....	Clandeboye.....	Mrs. M. L. Coates..	" "
Chemawawin.....	Chemawawin.....	Pas.....	Frank Barker.....	" "
Cross Lake (Prot.)	Cross Lake.....	Norway House.....	A. McNeill.....	Methodist.....
" (R.C.).....	" "	" "	Mrs. J. Descham- beault.....	Roman Catholic..
Cumberland.....	Cumberland.....	Pas.....	Edward Jones.....	Church of England
Eagle Lake.....	Eagle Lake.....	Savanne.....	James Fox.....	" "
†Ebb and Flow Lake	Ebb and Flow Lake	Manitowapah.....	Miss Eléonore La- Charitie.....	Roman Catholic..
†Fairford (Upper)	Fairford.....	" "	Chas. H. Fryer.....	Church of England
(Lower).....	" "	" "	W. Petty.....	" "
‡Fisher River.....	Fisher River.....	Norway House.....	J. Brookes Jones....	Methodist.....
Fort Alexander (Upper)	Fort Alexander.....	Clandeboye.....	Miss Sophia Spence.	Church of England
Frenchman's Head.	Lac Seul.....	Savanne.....	Rupert Clough.....	" "
Grand Rapids.....	Grand Rapids.....	Pas.....	Rev. James Brown..	" "
Hollowwater River	Hollowwater River	Norway House.....	John Sinclair.....	" "
Islington.....	Islington.....	Kenora.....	Daniel W. Wood.....	" "
Jackhead.....	Jackhead.....	Norway House.....	Leonard Hart.....	" "
Jack River.....	Jack River.....	" "	C. A. Wilkins.....	" "
Lake Manitoba.....	Lake Manitoba.....	Manitowapah.....	L. E. Martel.....	Roman Catholic..
Lake St. Martin.....	Lake St. Martin.....	" "	Lewis Le Clair.....	Church of England
Little Grand Rapids	Little Grand Rapids	Norway House.....	William Ivens.....	" "
Little Saskatchewan	Little Sask'tchewan	Manitowapah.....	John E. Favell.....	" "
Long Sault.....	Long Sault.....	Fort Frances.....	Miss B. Johnston..	" "

* Closed during September and December quarter, 1905. † Closed during September quarter, 1905.
 ‡ Closed during December quarter, 1905. This school is open during the summer months only.

SESSIONAL PAPER No. 27

STATEMENT—Continued.

Returns have been received) for the Year ended June 30, 1906.

Appropriation for Salary or yearly grant.	From what Fund Paid.	NUMBER ON ROLL.			Average Attendance.	STANDARD.						School.
		Boys.	Girls.	Total.		I	II	III	IV	V	VI	
£	cts.											BRITISH COLUMBIA—Continued.
300 00	Vote.	21	23	44	19	15	19	3	6	1		Port Essington.
300 00	"	34	18	52	13	21	24	7				Port Simpson.
300 00	"	18	9	27	12	18	8	1				Quamichan.
300 00	"	11	7	18	8	12	5	1				Saanich.
300 00	"	11	11	22	11	12	5	4	1			Skidegate.
300 00	"	12	2	14	5	10	3		1			Sonogobas.
300 00	"	7	10	17	8	10	4		3			Sonogobas.
300 00	"	12	10	22	10	11	6	5				Tsartlip.
300 00	"	9	12	21	9	13	5	3				Ucluelet.
300 00	"	10	12	22	8	15	7					Yuquot.
		547	458	1005	414	610	245	95	44	9	2	Total, British Columbia.
												MANITOBA.
300 00	Vote.	10	18	28	8	19	5	3	1			*Berens River.
300 00	"	12	13	25	11	19	6					Big Eddy.
300 00	"	4	8	12	6	10	2					Black River.
300 00	"	12	14	26	11	10	8	5	3			Brokenhead.
300 00	"	18	7	25	13	16	7	2				Chartawasin.
300 00	"	10	4	14	5	10	3	1				Cross Lake (Prot.)
300 00	"	8	18	26	11	18	8					(R.C.)
300 00	"	16	17	33	10	33						Cumberland.
300 00	"	8	8	16	5	13	3					Eagle Lake.
300 00	"	11	7	18	10	14	2	2				†Ebb and Flow Lake.
300 00	"	6	11	17	9	9	6	2				†Fairford (Upper).
300 00	"	17	16	33	16	24	6	3				" (Lower).
300 00	"	27	23	50	14	43	5		1	1		†Fisher River.
300 00	"	14	10	24	12	21	3					†Fort Alexander (Upper)
300 00	"	13	8	21	6	18	3					Frenchman's Head.
300 00	"	12	14	26	16	18	4	3	1			Grand Rapids.
300 00	"	9	9	18	6	9	5	4				Hollowwater River.
300 00	"	7	9	16	7	7	4	5				Islington.
300 00	"	7	7	14	9	9	5					Jackhead.
200 00	"	28	23	51	19	33	13	5				Jack River.
300 00	"	8	5	13	8	4	5	4				Lake Manitoba.
300 00	"	25	12	37	18	19	11	3	4			Lake St. Martin.
150 00	"	25	21	46	19	46						Little Grand Rapids.
300 00	"	6	8	14	8	10	2	2				Little Saskatchewan.
300 00	"	5	11	16	7	8	5	3				Long Sault.

6-7 EDWARD VII., A. 1907

SCHOOL

STATEMENT of Day Schools in the Dominion (from which Returns

School.	Reserve.	Agency.	Teacher.	Denomination.
MANITOBA- <i>Con.</i>				
*Manitou Rapids	Manitou Rapids ..	Fort Frances. ...	R. H. Bagshaw.....	Church of England
Moose Lake.....	Moose Lake.....	Pas	Walter C. Lundie...♦	" "
Muckles Creek.....	St. Peters	Clandeboyce.....	Miss. C. Fitz Gerald.	" "
†Oak River (Sioux).....	Oak River	Birtle	C. DeL. Harris.....	" "
Okanase.....	Okanase	"	Jas. A. Macalister...	Presbyterian.....
Pas	Pas	Pas	Ronald F. McDougall	Church of England
Pine Creek.....	Pine Creek.....	Manitowapah.....	Rev. A. Chaumont...	Roman Catholic...
Poplar River.....	Poplar River.....	Norway House....	James T. Blackford.	Methodist.....
Red Earth	Red Earth	Pas	John G. Kennedy...	Church of England
Roseau Rapids	Roseau Rapids ..	Portage la Prairie.	Miss Emma M c Mahon.	Undenominational
Rossville	Norway House....	Norway House....	Miss E. J. Armstrong	Methodist.....
Seine River.....	Seine River.....	Fort Frances	Peter Spence.....	Undenominational
Shoal Lake.....	Pas Mountain....	Pas	Louis Cochrane.....	Church of England
Shoal River.....	Shoal River.....	Manitowapah.....	Rev. T. H. Dobbs...	" "
St. Peters (North).....	St. Peters	Clandeboyce.....	R. S. Aston.....	" "
" (South).....	"	"	Miss C. E. M. Ridge-way.	" "
" (East).....	"	"	Peter Harper.....	" "
" (R. C.).....	"	"	Miss Mary Fitz Ger-ald.	Roman Catholic...
Swan Lake.....	Swan Lake.....	Portage la Prairie.	K. Cameron.....	Presbyterian.....
Wabigoon.....	Wabigoon	Savanne	J. S. Newton.....	Church of England
Waterhen River	Waterhen River..	Manitowapah.....	Lucien Guillot.....	Roman Catholic...
Total, Manitoba.....				

*School closed from September 30, 1905. †School closed during March and June quarters, 1906.

SESSIONAL PAPER No. 27

STATEMENT—Continued.

have been received) for the Year ended June 30, 1906.

Appropriation for Salary or yearly grant.	From what Fund Paid.	NUMBER ON ROLL.			Average Attendance.	STANDARD.						School.
		Boys.	Girls.	Total.		I	II	III	IV	V	VI	
\$ cts.												MANITOBA—Con.
300 00	Vote.....	5	6	11	5	6	5					*Manitou Rapids.
300 00	"	12	15	27	10	25	2					Moose Lake.
300 00	"	4	9	13	6	9	1	2	1			Muckles Creek.
300 00	"	8	10	18	5	18						+Oak River (Sioux)
300 00	"	11	8	19	7	15	3	1				Okanase.
300 00	"	23	21	44	28	22	5	9	5	3		Pas.
\$12 p.c.	"	5	14	19	15	13	3	2	1			Pine Creek.
300 00	"	16	8	24	7	16	5	3				Poplar River.
300 00	"	13	5	18	12	8	5	2	3			Red Earth.
300 00	"	11	13	24	11	14	10					Roseau Rapids.
300 00	"	11	6	17	7	15	2					Rossville.
300 00	"	8	14	22	13	22						Seine River.
300 00	"	8	4	12	7	9	1	2				Shoal Lake.
300 00	"	8	17	25	15	21	4					Shoal River.
300 00	"	14	10	24	8	18	3	3				St. Peters (North).
300 00	"	23	16	39	15	15	16	5	1	2		" (South).
300 00	"	10	15	25	9	16	1	2		4	2	" (East).
300 00	"	15	11	26	11	17	7	2				" (R.C.)
300 00	"	6	5	11	4	11						Swan Lake.
300 00	"	11	15	26	10	19	5	2				Wabigoon.
300 00	"	3	5	8	7	2	4	2				Waterhen River.
.....		543	528	1071	476	751	203	84	21	10	2	Total, Manitoba.

6-7 EDWARD VII., A. 1907

SCHOOL

STATEMENT of Day Schools in the Dominion (from which Returns have

School.	Reserve.	Agency.	Teacher.	Denomination.
SASKATCHEWAN.				
Ahtahkakoops.....	Ahtahkakoops..	Carlton.....	Louis Ahenakew....	Church of England
Big River.....	Kenemotayoos....	".....	William Bear.....	" "
Day Star's.....	Day Star's.....	Touchwood Hills..	Miss Soph. E. Smythe	" "
Fort à la Corne (South)..	James Smith's....	Duck Lake.....	Mrs. Ada A. Godfrey	Undenominational
James Smith's.....	".....	".....	Alex. Ahenakew....	Church of England
John Smith's.....	John Smith's....	".....	Edward Ahenakew..	" "
Keys.....	Keys.....	Pelly.....	Rev. Owen Owens..	" "
Lac la Ronge.....	Lac la Ronge....	Carlton.....	Samuel Abraham....	" "
Little Pines.....	Little Pines....	Battleford.....	C. T. Desmarais....	" "
Meadow Lake.....	Meadow Lake....	".....	Pierre C. Morin....	Roman Catholic..
*Mistawasis.....	Mistawasis.....	Carlton.....	C. W. Bryden.....	Presbyterian.....
Montreal Lake.....	Montreal Lake..	".....	Jno. R. Settle.....	Church of England
Poundmaker's.....	Poundmaker's....	Battleford.....	Miss Agnes Calvert..	Roman Catholic..
Red Pheasant.....	Red Pheasant....	".....	Mrs. R. Jefferson...	Church of England
*Sioux Mission.....	Wahspaton.....	Carlton.....	Jonathan Beverley..	Presbyterian.....
Stony (Eagle Hills)...	Stony.....	Battleford.....	Andrew Love.....	Church of England
Sturgeon Lake.....	William Twatt's..	Carlton.....	Robert Bear.....	" "
Thunderchild's (C.E.)...	Thunderchild's..	Battleford.....	G. F. Gibbs.....	" "
White Bear.....	White Bear.....	Moose Mountain..	Miss E. May Armstrong.	Presbyterian.....
Total, Saskatchewan.				
ALBERTA.				
Goodfish Lake.....	Pakan.....	Saddle Lake.....	Vincent Smith.....	Methodist.....
Louis Bull's.....	Louis Bull's.....	Hobbema.....	A. A. Goodhand.....	".....
*Saddle Lake.....	Saddle Lake.....	Saddle Lake.....	Chas. W. Leonard....	".....
Sampson's.....	Samson's.....	Hobbema.....	Miss Sue Klippert..	".....
St. Anthony's.....	Lesser Slave Lake	Treaty No. 8....	Rev. A. Desmarais..	Roman Catholic..
	Peace River Dist.		O. M. I.....	
†Upper Peace River	At Shaftsbury, Up-	".....	Miss Lilian Millen	Church of England
(Christ Church Mis-	per Peace River			
sion.).....	District.....			
Whitefish Lake.....	James Seenums....	Saddle Lake.....	Miss Annie Whitford	Methodist.....
*Whitefish Lake (St.)	Lesser Slave Lake	Treaty No. 8....	C. D. White.....	Church of England
Andrews Mission.)..	District.....			
‡White Whale Lake....	Paul's.....	Edmonton.....	W. G. Blewett.....	Methodist.....
Total, Alberta.....				

*Closed during September quarter, 1905. †No return received for December quarter, 1905.

‡Closed from December 31, 1905, on account of poor attendance.

SESSIONAL PAPER No. 27

STATEMENT—*Continued.*

been received) for the Year ended June 30, 1906.

Appropriation for Salary or yearly grant.	From what fund Paid.	NUMBER ON ROLL.			Average Attendance.	STANDARD.						School
		Boys	Girls	Total		I	II	III	IV	V	VI	
8 cts.												SASKATCHEWAN.
300 00	Vote.....	8	9	17	10	7	5	3	2			Ahtahkakoops.
300 00	"	8	5	13	5	8	5					Big River.
300 00	"	7	9	16	13	5	3	4	4			Day Star's.
300 00	"	7	13	20	9	19	1					Fort à la Corne (South).
300 00	"	16	18	34	9	33	1					James Smith's
300 00	"	9	13	22	8	12	6	4				John Smith's.
300 00	"	10	12	22	7	17	1	4				Keys.
300 00	"	7	7	14	10	10	4					Lac la Ronge.
300 00	"	8	5	13	6	10	2	1				Little Pines.
300 00	"	6	4	10	4	10						Meadow Lake.
300 00	"	8	8	16	8	6	6	3		1		*Mistawasis.
300 00	"	20	26	46	14	28	14	2	2			Montreal Lake.
300 00	"	8	5	13	4	10	3					Poundmaker's.
300 00	"	8	5	13	6	10	2	1				Red Pheasant.
300 00	"	3	4	7	5	2	4	1				*Sioux Mission.
300 00	"	5	2	7	4	7						Stony (Eagle Hills).
300 00	"	9	8	17	6	8	6	3				Sturgeon Lake.
300 00	"	6		6	3	5	1					Thunderchild's (C. E.)
300 00	"	8	9	17	7	4	2	10	1			White Bear.
		161	162	323	138	211	66	36	9	1		Total, Saskatchewan.
												ALBERTA.
300 00	Vote.....	11	8	19	8	15	3	1				Goodfield Lake.
300 00	"	7	4	11	5	11						Louis Bull's.
300 00	"	13	6	19	9	14	5					*Saddle Lake.
300 00	"	19	12	31	4	27	4					Samson's.
300 00	"	13	11	24	24	24						St. Anthony's.
300 00	"	9	3	12	7	5	1	2	4			{+Upper Peace River (Christ Church Mis- sion).
300 00	"	10	11	21	7	21						Whitefish Lake.
300 00	"	19	8	27	9	16	8	2	1			{*Whitefish Lake (St. Andrews Mission.)
300 00	"	16	7	23	7	23						†White Whale Lake.
		117	70	187	80	156	21	5	5			Total, Alberta.

6-7 EDWARD VII., A. 1907

SCHOOL

STATEMENT of Day Schools in the Dominion (from which Returns have

School.	District	Teacher.	Denomination.
OUTSIDE TREATY LIMITS.			
Carcross.....	Yukon District.....	Miss F. Hutchison..	Church of England
Fort George.....	Fort George, James Bay District....	Rev. W. G. Walton..	" "
Island Lake.....	At Island Lake, Northwest Territories	Joseph H. Lowes....	Methodist.....
Moosehide.....	Yukon District.....	A. C. Field.....	Church of England
Providence Mission (Sacred Heart).....	Fort Providence, Mackenzie River } district, N. W. T..... }	Sister St. Elzear....	Roman Catholic...
Rupert's House.....	At Ruperts House, James Bay district	Rev. J. E. Woodall..	Church of England
St. David's Mission.....	Fort Simpson, McKenzie River dis- trict, N. W. T.. .. .	Rev. James R. Lucas	" "
Total, Outside Treaty.....			

NOTE.—The government paid \$3,000 to provide for education in the Yukon district for the fiscal year 1905-6.

SESSIONAL PAPER No. 27

STATEMENT—Continued.

been received) for the Year ended June 30, 1906.

Appropriation for Salary or yearly grant.	From what fund Paid.	NUMBER ON ROLL.			Average Attendance.	STANDARD.						School.
		Boys.	Girls.	Total.		I	II	III	IV	V	VI	
cents.												OUTSIDE TREATY LIMITS
200 00	Vote.....	5	5	10	8	2	4	1	2	1		Carcross.
200 00	".....	46	45	91	53	91						Fort George.
200 00	".....	10	7	17	6	17						Island Lake.
		7	12	19	10	1	4	5	7	2		Moosehide.
200 00	Vote.....	18	19	37	37	23	10	2	2			Providence Mission
200 00	".....	31	38	69	53	69						(Sacred Heart.)
200 00	".....	12	6	18	8	16		2				Rupert's House.
												St. David's Mission.
		129	132	261	175	219	18	10	11	3		Total, Outside Treaty.

6-7 EDWARD VII., A. 1907

SCHOOL

STATEMENT of Boarding Schools in the Dominion (from which

School.	Situation.	Principal.	Denomination.
ONTARIO.			
Fort William Orphanage	At Fort William, Ont.	Sister M. Ignatia	Roman Catholic
BRITISH COLUMBIA.			
Ahousaht	At Ahousaht, West Coast agency	Rev. J. L. Millar, B. A.	Presbyterian
Alberni	Near Alberni, adjoining Sheshaht reserve, West Coast agency	James R. Motion	"
Port Simpson Boy's Home	At Port Simpson, Northwest Coast agency	Rev. J. C. Butchart, B. A.	Methodist
Port Simpson Girls' Home	At Port Simpson, Northwest Coast agency	Miss Hannah M. Paul	"
Sechelt	Sechelt reserve, Fraser river agency	Sister Theresine	Roman Catholic
Squamish	Burrard inlet, opposite city of Vancouver, Fraser river agency	Sister Mary Amy	"
St. Mary's	At St. Mary's Mission, on the Fraser river	Rev. Ch. Marchal, O. M. I.	"
Yale (All Hallows)	At Yale, on the Fraser river	Amy, Sister Superior	Church of England
Total, British Columbia			
MANITOBA.			
Birtle	At Birtle Man	W. W. McLaren	Presbyterian
Cecilia Jeffrey	East of Shoal Lake reserve, Kenora agency	Austin G. McKittrick	"
Fort Alexander	Fort Alexander reserve, Clandeboye agency	Rev. Ph. Vales, O. M. I.	Roman Catholic
Fort Frances	On Agency reserve, Fort Frances agency	Rev. H. M. Brassard, O. M. I.	"
Kenora	At Kenora, Ont. Kenora agency	Rev. Mathias Kalmes, O. M. I.	"
Norway House	At Rossville Village on Norway House reserve	Rev. J. A. Lousley	Methodist
Pine Creek	Near Pine Creek reserve, Lake Winnipegosis, Manitowapah agency	Rev. A. Chaumont	Roman Catholic
Portage la Prairie	At Portage la Prairie, Man.	W. A. Hendry	Presbyterian
Sandy Bay	Sandy Bay reserve, Manitowapah agency	Rev. G. Leonard	Roman Catholic
Total, Manitoba			
SASKATCHEWAN.			
Cowessess	On Cowessess reserve, Crooked Lakes agency	Rev. S. Perrault, O. M. I.	Roman Catholic
Crowstand	Near Côté's reserve, Pelly agency	Rev. W. McWhinney	Presbyterian
Duck Lake	3 miles from Duck Lake reserve, Duck Lake agency	" O. Charlebois, O. M. I.	Roman Catholic
Emmanuel College	2 Miles west of Prince Albert	Rev. James Taylor	Church of England
File Hills	Adjoining File Hills reserve, Qu'Appelle agency	Miss. Kate Gillispie	Presbyterian

SESSIONAL PAPER No. 27

STATEMENT—Continued.

Returns have been received) for year ended June 30, 1905.

Grant.	From what Fund paid.	NUMBER ON ROLL.			Average Attendance.	STANDARD.						School.
		Boys.	Girls.	Total.		I	II	III	IV	V	VI	
ONTARIO.												
\$1,500.....	Vote..	8	17	25	20	3	5	11	6	...	...	Fort William Orphanage.
BRITISH COLUMBIA.												
25 pupils, \$60 p. cap.	Vote..	22	16	38	35	5	5	16	10	2	...	Ahousaht.
50 " \$60 " " "	"	25	19	44	38	4	6	16	12	6	...	Alberni.
20 " \$60 " " "	"	26	...	26	19	6	7	9	2	2	...	Port Simpson Boys' Home.
35 " \$60 " " "	"	...	47	47	43	14	15	...	15	3	...	Port Simpson Girls' Home.
50 " \$60 " " "	"	19	30	49	45	35	14	...	...	...	...	Sechelt.
50 " \$60 " " "	"	21	29	50	50	18	10	11	5	2	4	Squamish.
60 " \$60 " " "	"	38	47	85	80	12	18	29	14	12	...	St. Mary's.
35 " \$60 " " "	"	...	38	38	33	7	5	8	5	6	7	Yale (All Hallows).
.....		151	226	377	343	101	80	89	63	33	11	Total, B. C.
MANITOBA.												
50 pupils, \$72. p. cap.	Vote..	20	32	52	44	19	8	12	13	...	...	Birtle.
30 " \$72 " " "	"	25	20	45	31	28	8	8	1	...	...	Cecilia Jeffrey.
45 " \$72 " " "	"	24	22	46	45	31	9	4	1	1	...	Fort Alexander.
40 " \$72 " " "	"	16	17	33	32	24	9	...	...	...	...	Fort Frances.
30 " \$72 " " "	"	17	16	33	28	10	7	10	6	...	...	Kenora.
50 " \$72 " " "	"	31	31	62	51	24	10	18	10	...	...	Norway House.
65 " \$72 " " "	"	25	36	61	60	15	7	14	13	7	5	Pine Creek.
25 " \$72 " " "	"	10	16	26	23	13	2	7	3	...	1	Portage la Prairie.
42 " \$72 " " "	"	22	19	41	35	30	5	2	3	1	...	Sandy Bay.
.....		190	209	399	349	194	65	75	50	9	6	Total Manitoba.
SASKATCHEWAN.												
45 pupils, \$72 p. cap.	Vote..	27	18	45	44	19	10	9	7	...	...	Cowessess.
50 " \$72 " " "	"	27	23	50	47	16	12	11	6	5	...	Crowstand.
100 " \$100 p. cap.	"	55	48	103	100	17	6	32	31	12	5	Duck Lake.
20 boys, \$100 p. cap.	}	30	24	54	48	19	20	9	3	3	...	Emmanuel College.
32 (boys and girls) \$72 p. cap.												
25 pupils, \$72 p. cap.	"	10	7	17	16	9	...	3	2	3	...	File Hills.

6-7 EDWARD VII., A. 1907

SCHOOL

STATEMENT of Boarding Schools in the Dominion (from which

School.	Situation.	Principal.	Denomination.
SASKATCHEWAN—<i>Con.</i>			
Gordon's.....	On Geo. Gordon's reserve, Touchwood Hills agency.....	J. W. Harrison.....	Church of England
Isle à la Crosse.....	At Isle à la Crosse, Carlton agency.	Rev. Francois Aensel, O.M.I.....	Roman Catholic..
Keeseekouse.....	Near Keeseekouse reserve, Pelly agency.....	Rev. J. DeCorby, O.M.I.....	" " ..
Muscowequan's.....	Adjoining Muscowequan's reserve, Touchwood Hills agency.....	Rev. J. A. Magnan.	Roman Catholic..
Onion Lake (R.C.).....	On Seekaskootch reserve, Onion Lake agency.....	" E.J. Cunningham	" "
" " (C.E.).....	On Makaoo's reserve, Onion Lake agency.....	" J. R. Matheson..	Church of England
Round Lake.....	On north side Round Lake, Crooked Lakes agency.....	" H. McKay.....	Presbyterian
Thunderchild's.....	Adjoining Thunderchild's reserve, Battleford agency.....	" H. Delmas, O.M.I.	Roman Catholic..
Total, Saskatchewan.....			
ALBERTA.			
Blood (C.E.).....	Off reserve, opposite Blood agency headquarters.....	Rev. G. E. Gale....	Church of England
" (R.C.).....	On Blood reserve, Blood agency..	Rev. J. L. LeVern, O.M.I.....	Roman Catholic..
Blue Quill's.....	On Blue Quill's reserve, Saddle Lake agency.....	Rev. Leon Balter...	" "
Crowfoot.....	At South Camp Blackfoot reserve, Blackfoot agency.....	Rev. J. Riou, O.M.I.	" "
Ermineskin's.....	On Ermineskin's reserve, Hobbema agency.....	Rev. R. L. Dauphin, O. M. I.	" "
Ft. Chipewyan (Holy Angels)	At Nativity Mission, Fort Chipewyan Treaty No. 8.....	Sister M. McDougall	" "
Lesser Slave Lake (C.E.)....	On northwest side of Lesser Slave Lake, Treaty No. 8.....	Theodore W. Streeter	Church of England
" " " (R.C.)....	On northeastern side Lesser Slave Lake, Treaty No. 8.....	Rev. A. Desmarais, O. M. I.	Roman Catholic.
McDougall Orphanage.....	In Morleyville Settlement, Stony agency.....	C. B. Oakley.	Methodist.....
Old Sun's.....	At North Camp Blackfoot reserve, Blackfoot agency.....	Rev. H. W. Gibbon-Stocken	Church of England
Peigan (C.E.).....	On Peigan reserve, Peigan agency	Rev. W. R. Haynes.	" "
" (R.C.).....	" " "	" L. Doucet, O.M.I.	Roman Catholic.
Sarcee.....	On Sarcee reserve, Sarcee agency	Percy Stocken.....	Church of England
Smoky River (St. Augustine)	Near Peace River Crossing, at mouth Smoky river, Treaty No. 8	Rev. Sister Mathias.	Roman Catholic.

SESSIONAL PAPER No. 27

STATEMENT—Continued.

Returns have been received) for the Year ended June 30, 1906.

Grant.	From what Fund paid.	NUMBER ON ROLL.			Average Attendance.	STANDARD.						School.			
		Boys.	Girls.	Total.		I	II	III	IV	V	VI				
SASKATCHEWAN—Con.															
40	"	\$72	"	"	"	16	11	27	24	10	4	2	8	3	Gordon's.
20	"	\$72	"	"	"	6	14	20	20	8	8	4			Isle à la Crosse.
25	"	\$72	"	"	"	9	17	26	22	11	6	4	5		Keeseekouse.
40 pupils.	\$72 p. cap.	Vote.				16	18	34	31	10	5	4	8	7	Muscowequan's.
50	"	\$72	"	"	"	24	19	43	33	11	8	7	6	9	2 Onion Lake (R.C.)
20	"	\$72	"	"	"	8	6	14	11	4	3	1	3	3	" " (C.E.)
40	"	\$72	"	"	"	18	15	33	30	9	6	11	3	2	2 Round Lake.
20	"	\$72	"	"	"	12	8	20	20	12		6		2	Thunderchild's.
						258	228	486	446	155	88	103	82	49	9 Total, Saskatchewan.
ALBERTA.															
50	"	\$72	"	Vote.		19	21	40	36	13	8	10	3	6	Blood (C.E.)
40	"	\$72	"	"	"	18	23	41	38	26	4	8	3		" (R.C.)
45	"	\$72	"	"	"	24	15	39	34	11	7	1	10	4	6 Blue Quill's.
30	"	\$72	"	"	"	20	12	32	30	7	12	6	4	3	Crowfoot.
50	"	\$72	"	"	"	24	26	50	50	20	6	8	9	5	2 Ermineskin's.
40	"	\$72	"	"	"	21	24	45	40	10	16	15	2	2	Ft. Chipewyan (Holy Angels)
15	"	\$72	"	"	"	10	15	25	14	5	6	4	7	3	Lesser Slave Lake (C.E.)
40	"	\$72	"	"	"	20	19	39	38	20	12	7			" " " (R.C.)
45	"	\$72	"	"	"	22	21	43	33	17	7	12	7		McDougall Orphanage.
50	"	\$72	"	"	"	21	16	37	31	10	8	8	11		Old Sun's.
30	"	\$72	"	"	"	15	15	30	26	19	8	3			Peigan (C.E.)
30	"	\$72	"	"	"	16	14	30	28	14		8	1		" (R.C.)
20	"	\$72	"	"	"	8	7	15	15	7		2	4	2	Sarcee.
15	"	\$72	"	"	"	7	6	13	11	8	3	2			Smoky River (St. Augustine)

6-7 EDWARD VII., A. 1907

SCHOOL

STATEMENT of Boarding Schools in the

School.	Situation.	Principal.	Denomination.	Grant.
<i>ALBERTA.—Con.</i>				
St. Albert.....	In St. Albert Settlement	Rev. Sr. L. A. Dan-		
Wabiskaw Lake (C.E.)	At St. John's Mission Wabiskaw Lake Treaty: No. 8.....	durand..... Miss Esther A. Gar-	Roman Catholic..	80 pupils, \$72 p. cap.
" " (R.C.)	At St. Martin's Mis- sion, Wabiskaw Lake, Treaty No. 8.	diner..... Rev. Sr. Mary Flore	Church of England	15 " \$72 " "
			Roman Catholic..	25 " \$72 " "
Total, Alberta....				
<i>N. W. TERRITORIES.</i>				
Hay R. (St. Peter's Mis'n)	At Hay River, Great Slave Lake, Treaty No. 8.....	Rev. Thos. J. Marsh	Church of England	15 " \$72 " "
Fort Resolution.....	At Fort Resolution, Great Slave Lake, Treaty No. 8.....	Rev. Sr. McQuillan	Roman Catholic..	25 " \$72 " "
Total, N. W. T....				

6-7 EDWARD VII., A. 1907

SCHOOL

STATEMENT of Industrial Schools in the

School.	Situation.	Principal.	Denomination.	Grant.
ONTARIO.				
Mohawk Institute	At Brantford.....	Rev. R. Ashton...	Undenominational	100 pupils, \$86 per cap
Mount Elgin Institute.	At Muncey.....	Rev. T. T. George...	Methodist	100 " \$86 "
Shingwauk Home.	At Sault Ste. Marie.	Geo. Ley King....	Church of England	100 " \$86 "
Wikwemikong (boys)...	At Wikwemikong...	Rv. T. Couture, S.J.	Roman Catholic...	72 " \$86 "
" (girls) ..	" ..	" ..	" ..	60 " \$86 "
Total, Ontario...	.....	.....	.....	.....
BRITISH COLUMBIA.				
Alert Bay	At Alert Bay, Kwaw-	A. W. Corker. ...	Church of England	35 pupils, \$130 per cap
Clayoquot... ..	On Clayoquot sound,			
	west coast Van-			
	couver Island	Rev. P. Maurus...	Roman Catholic...	50 " \$130 "
Coqualeetza Home .	At Chilliwack, Fraser			
	River agency.....	Rev. R. H. Cairns.	Methodist	80 " \$130 "
Kamloops	At Kamloops.....	Rev. A. M. Carion.	Roman Catholic...	50 " \$130 "
Kootenay.....	At St. Eugene, Koot-			
	nay agency	Rev. N. Coccola ..	" ..	50 " \$130 "
Kuper Island.....	At Kuper Island.			
	Cowichan agency..	Rev. G. Donckele.	" ..	50 " \$130 "
Lytton.....	2½ miles from Lytton,			
	Kamloops-O k a n a-	Rev. Geo. Ditcham	Church of England	40 " \$130 "
	gan agency			
Metlakahtla	At Metlakahtla, West	Rev. Jno. R. Scott.	" ..	130 boys, \$140 " 1
	Coast agency.....			130 girls, \$100 " 1
Williams Lake.....	At Williams Lake...	Rev. H. Boening.	Roman Catholic...	50 pupils, \$130 per cap
Total, B. C. ....	.....	.....	.....	.....
MANITOBA.				
Brandon.....	At Brandon.....	Rev. T. Ferrier...	Methodist.....	115 pupils, \$120 p. cap
*Elkhorn.....	At Elkhorn.....	A. E. Wilson....	Undenominational	.....
†Rupert's Land.....	At Middle Church...	Joseph Thompson.	" ..	.....
Total, Manitoba...	.....	.....	.....	.....
SASKATCHEWAN.				
Battleford.....	At Battleford	Rev. E. Matheson.	Church of England	120 pupils, \$145 p. cap
Qu'Appelle.....	At Lebreton.....	Rev. J. Hugonard.	Roman Catholic ..	225 " \$120 "
Regina.....	At Regina.....	B. B. Heron.....	Presbyterian	125 " \$145 "
Total, Sask.....	.....	.....	.....	.....
ALBERTA.				
*Calgary	At Calgary.....	Rev. G. H. Hogbin	Undenominational	.....
Red Deer.....	At Red Deer.....	Rev. J. P. Rice....	Methodist	80 pupils, \$130 p. cap
St. Joseph's.....	At Davisburg	Rev. A. Naessens.	Roman Catholic...	120 " \$130 "
Total, Alberta...	.....	.....	.....	.....

All expenses paid by the government.

† This school was destroyed by fire

NOTE—All boys at industrial schools are taught farming, and all

SESSIONAL PAPER No. 27

STATEMENT.

Dominion for the Year ended June 30, 1906.

From what fund Paid.	NUMBER ON ROLL.			Average Attendance.	STANDARD.						INDUSTRIES TAUGHT.							School.
	Boys.	Girls.	Total.		I	II	III	IV	V	VI	Carpenter. Shoemaker. Tailor.	Blacksmith. Baker.	Harnessmaker Printer. Painter. Tinsmith.					
ONTARIO.																		
Vote.....	51	61	112	105	8	29	12	19	20	24	2							Mokawik Institute.
" & sch'l fund	57	49	106	97	25	13	31	23	12	2								Mount Elgin Institute.
"	40	21	61	55	16	11	17	3	14	4								Shingwauk Home.
"	77	77	73	42	12	15	7	1	2									Wikwemikong (boys).
"	65	65	62	13	19	11	10	12										(girls).
.....	225	196	421	392	104	84	86	62	59	26	8							Total, Ontario.
BRITISH COLUMBIA.																		
Vote.....	34	..	34	32	2	8	8	5	9	2	17							Alert Bay.
"	31	37	68	60	4	15	12	19	5	13	9	5				7		Clayoquot.
"	55	33	88	76	13	17	28	13	8	9	5		6					Coqualeetza Home.
"	36	33	63	61	9	12	14	15	5	8	14	7						Kanloops.
"	28	24	52	50	7	9	18	5	11	2								Koctenay.
"	34	30	64	60	9	9	16	15	10	5	4	6		7		2		Kuper Island.
"	31	..	31	26	7	12	12	..	..	..	5		4					Lytton.
"	36	32	68	54	8	11	15	17	17	..	13	2				12		Metlakahla.
"	23	33	56	53	23	..	10	15	8	..	4							Williams Lake.
.....	302	222	524	472	82	93	133	104	73	39	71	20	..	4	13	..	21	Total, B.C.
MANITOBA.																		
Vote.....	46	50	96	91	42	18	27	2	7	..	..	..	..	..	..	..	..	Brandon.
"	60	51	111	71	21	7	25	36	10	12	11	..	2	2	2	..	..	*Elkhorn.
"	38	35	73	56	14	23	22	10	4	..	5	2	..	..	..	..	..	†Rupert's Land.
.....	144	136	280	218	77	48	74	48	21	12	16	..	2	2	2	..	..	Total, Manitoba.
SASKATCHEWAN.																		
Vote.....	38	39	77	71	8	11	21	15	16	6	13	..	4	..	..	..	..	Battleford.
"	95	124	219	206	57	60	58	24	20	..	9	10	..	4	3	..	1	3 Qu'Appelle.
"	47	28	55	56	18	7	16	11	15	8	4	..	..	2	..	3	..	Regina.
.....	180	191	371	332	83	78	95	50	51	14	26	10	..	4	9	3	1	3 Total, Sask.
ALBERTA.																		
Vote.....	31	..	31	18	2	13	7	4	5	..	..	..	..	..	..	..	..	*Calgary.
"	58	33	91	83	46	13	13	11	7	1	4	..	..	..	..	..	..	Red Deer.
"	56	23	79	77	9	19	21	10	14	6	5	..	..	..	..	..	..	St. Joseph's.
.....	145	56	201	178	57	45	41	25	26	7	9	..	..	..	..	..	..	Total, Alberta.

January 4, 1906, some of the pupils were sent home and the rest transferred to Elkhorn. girls, sewing, knitting and general household duties.

6-7 EDWARD VII., A. 1907

SUMMARY OF

Province.	Class of School.			Number of Schools.	Denomination.						Number on Roll.			Average Attendance.
	Day	Boarding	Industrial		Undenominational	Roman Catholic	Church of England	Methodist	Presbyterian	Salvation Army	Boys	Girls	Total	
Ontario.....	76	1	5	82	37	24	11	10			1,431	1,386	2,817	1,543
Quebec.....	18			18	3	11	1	3			397	385	782	400
Nova Scotia.....	11			11		11					114	87	201	78
New Brunswick.....	6			6		6					74	69	143	81
Prince Edward Island.....	1			1		1					8	14	22	10
British Columbia.....	35	8	9	52		16	15	16	4	1	1,000	906	1,906	1,229
Manitoba.....	46	9	3	58	4	11	31	7	5		877	873	1,750	1,043
Saskatchewan.....	19	13	3	35	1	10	17		7		599	581	1,180	916
Alberta.....	9	17	3	29	1	12	8	8			564	421	985	787
Northwest Territories.....		2		2		1	1				21	20	41	30
Outside Treaty Limits.....	7			7		1	5	1			129	132	261	175
Total.....	228	50	23	301	46	104	89	45	16	1	5,214	4,874	10,088	6,292

NOTE.—All boys at industrial schools are taught farming, and all girls sewing, knitting and general

DEPARTMENT OF INDIAN AFFAIRS,

OTTAWA, September 29, 1906.

SESSIONAL PAPER No. 27

SCHOOL STATEMENT

Percentage of Attendance.	Standard.						Industries taught.								Province.			
	I	II	III	IV	V	VI	Carpenter	Shoemaker	Tailor	Blacksmith	Baker	Harnessmaker	Printer	Painter		Tinsmith	Total.	
54·77	1,350	597	450	244	140	36	8										8	Ontario.
51·15	439	122	133	61	21	6												Quebec.
38·80	93	43	32	17	9	7												Nova Scotia.
56·64	44	28	34	26	9	2												New Brunswick.
45·45	6	1		11	4													Prince Edward Island.
64·48	793	418	317	211	115	52	71	20	4	13		21					129	British Columbia.
59·60	1,022	316	233	119	40	20	16	2	2	2							22	Manitoba.
77·62	449	232	234	141	101	23	26	10	4	9		3	1	3			56	Saskatchewan.
79·90	456	193	172	98	51	15	9										9	Alberta.
73·17	16	6	10	4	5													Northwest Territories.
67·05	219	18	10	11	3													Outside Treaty Limits.
62·37	4,887	1,974	1,625	943	498	161	130	30	2	10	22	2	3	22	3	224	Total.	

household duties.

6-7 EDWARD VII., A. 1907

INDIAN LAND STATEMENT

SHOWING the number of acres of Indian Lands sold during the year ended June 30, 1906, the total amount of purchase money realized and the approximate quantity of land remaining unsold at that date.

ONTARIO.

Town or Township.	County or District.	Number of acres of land sold.	Amount of sales.	Approximate Quantity remaining unsold.	Remarks.
		Acres.	\$ cts.	Acres.	
Albemarle	Bruce			159 00	Some of these lands were resumed by the department, the conditions of sale not having been complied with, so that in certain cases there appears to have been more land remaining unsold at the close of the past fiscal year than remained unsold according to the previous year's report.
Amabel	"			2,540 00	
Eastnor	"			3,075 00	
Lindsay	"			3,806 00	
St. Edmund	"			89 58	
Bury (T. plot)	"	86 95	15 00	1,111 00	
Hardwicke (T. plot)	"			40 09	
Oliphant (T. plot)	"			21 75	
Southampton (T. plot)	"			12 22	
Warton (T. plot)	"				
Cape Hurd Islands	"	6,405 00	3,028 00		
Saugeen Fishing Islands	"	4 60	25 00	495 80	
Keppel	Grey	100 00	400 00	130 60	
White Cloud Island	"			7 00	
Thessalon	Algoma	234 80	234 80	1,382 64	
Thessalon (T. plot)	"	0 60	30 00	29 79	
Aweres	"			5,053 10	
Archibald	"			3,264 00	
Dennis	"	78 50	39 25	1,417 50	
Herrick	"			80 00	
Havilland	"			641 50	
Kars	"			9,203 00	
Apaquosh (T. plot)	"			312 74	
Laird	"			4,129 43	
Macdonald	"	12 00	6 00	1,583 85	
Meredith	"	138 00	552 00	5,071 65	
Duncan	"			10,700 00	
Kehoe	"			14,840 50	
Thompson	"			318 73	
Cobden	"			186 08	
Pennefather	"	161 00	80 50	2,645 00	
Ley	"			6,750 00	
Fisher (T. plot)	"			496 00	
Tilley	"			281 00	
Mississauga Res.	"	14 95	22 43		
Tupper	"			3,353 00	
Fenwick	"	1,531 50	3,597 75	6,285 25	
Vankoughnet	"	249 00	124 50	6,757 50	
Shingouicouse (T. plot)	"				
Billings	Manitoulin	72 00	34 40	4,152 00	
Bidwell	"	1,945 75	514 63	3,326 25	
Howland	"	188 00	52 40	4,223 06	
Shenguandah	"	408 00	81 60	7,238 00	
(T. plot)	"			314 82	
Assiginack	"	100 00	20 00	4,510 93	
Campbell	"	100 00	50 00	6,375 00	
Manitowaning (T. plot)	"	0 20	12 00	20 76	
Carnarvon	"	754 00	228 45	8,427 00	
Tehkummah	"	54 00	10 80	4,843 00	
Sandfield	"			6,976 00	

SESSIONAL PAPER No. 27

INDIAN LAND STATEMENT showing the number of acres, &c. sold during the year ended June 30, 1906, &c.—*Continued.*

ONTARIO—*Continued.*

Town or Township.	County or District.	Number of acres of Land sold.	Amount of Sales.	Approximate Quantity remaining unsold.	Remarks.
		Acres.	\$ cts.	Acres.	
Shaftesbury (T. plot).....	Manitoulin.....	.....	.....	251 98	
Tolsmaville (T. plot).....	".....	5 50	46 00	1,003 17	
Allan.....	".....	470 00	232 00	2,265 00	
Burpee.....	".....	413 00	97 55	8,798 00	
Barrie Island.....	".....	178 00	17 80	1,939 00	
Gordon.....	".....	42 00	21 00	2,668 00	
Gore Bay (Town).....	".....	.....	.....	1 50	
Mills.....	".....	200 00	65 00	5,173 00	
Cockburn Island.....	".....	200 00	100 00	25,858 00	
Dawson.....	".....	.....	.....	8,864 00	
Robinson.....	".....	300 00	80 00	30,089 00	
Neebing.....	Thunder Bay.....	.....	.....	.....	
Cayuga.....	Haldimand.....	.....	.....	297 60	
" (T. plot).....	".....	14 46	157 10	108 31	
Dunn.....	".....	.....	.....	1,571 50	
Caledonia.....	".....	.....	.....	51 29	
Alnwick Res.....	Northumberland.....	43 03	851 00	.....	Surveyed as sold.
Brantford.....	Brant.....	.....	.....	135 85	
Bronte (T. plot).....	Halton.....	.....	.....	85	
Port Credit (T. plot).....	Peel.....	.....	.....	25	
Deseronto T. plot).....	Hastings.....	3 78	433 00	2 06	
Shannonville (T. plot).....	".....	20	25 00	2 47	
Islands in the River St. Lawrence.....	Prov. Ontario.....	83 82	5,491 00	29 56	
Islands in the Bay of Quinte.....	".....	.....	.....	.....	Area undetermined.
" " Otonabee River and Lakes.....	Peterborough.....	5 05	35 00	1,934 24	
Islands in the Georgian Bay.....	Parry Sound.....	918 99	7,711 00	.....	
South Baymouth (T. plot).....	Manitoulin.....	71	35 50	139 78	
Meldrum (T. plot).....	".....	1 00	84 00	79 98	
Fort William reserve.....	Thunder Bay.....	1,600 00	242,936 00	.....	Rt. of way and Terminal of G. T. P. Ry.
Rama reserve.....	Ontario.....	1 73	51 90	.....	Surveyed as sold.
White Fish Island reserve.....	Algoma.....	7 92	1,861 20	.....	"
French River reserve.....	".....	30 25	302 50	.....	"
Serpent River reserve.....	".....	198 00	5,000 00	.....	"
		17,406 29	274,793 06	237,850 25	

QUEBEC.

Quarante Arpents.....	Quebec.....	283 38	1,540 00	.....	
Ouatchouan.....	Lake St. John.....	.....	.....	2,416 12	
Dundee.....	Huntingdon.....	107 95	269 93	4,878 36	
Maniwaki.....	Wright.....	10 20	142 03	.....	Surveyed as sold.
" (T. plot).....	".....	7 58	2,425 00	59 07	
Temiscamingue.....	Pontiac.....	632 20	482 08	13,444 42	
		1,041 31	4,859 04	20,797 97	

6-7 EDWARD VII., A. 1907

INDIAN LAND STATEMENT showing the number of acres, &c. sold during the year ended June 30, 1906. &c.—*Continued.*

NEW BRUNSWICK.

Town or Township.	County or District.	Number of acres of Land sold.	Amount of Sales.	Approximate Quantity remaining unsold.	Remarks.
		Acres.	\$ cts.	Acres.	
Tobique	Victoria.....	90·00	90 00	79·94	
Red Bank.....	Northumberland..	308·00	247 40	252 80	
Big Cove.....	Kent.....			193·76	
Big Hole.....	Northumberland..	464·00	371 20		
		862·00	708 60	526·50	

MANITOBA.

Gambler's reserve.....	Marquette.....			640·00	
Birdtail reserve.....	".....	79·17	395 18		For Ry. purposes.
Valley reserve.....	Gilbert Plains.....	135·54	950 05		"
		214·71	1,345 23	640 00	

SASKATCHEWAN.

Muskowekewn reserve.....	North Qu'Appelle..	158·18	1,967 16		For Ry. purposes.
Kamsack (T. plot).....	Saltcoats.....	2,695·00	2,982 50	16,055·00	
Chacastapasin.....	Prince Albert.....			160 00	
Assiniboine reserve.....	Wolseley.....	5,243·20	35,345 45	320·50	
Yellow Quill reserve.....		13·82	276 40		For Ry. purposes
Stony reserve.....	Battleford.....	9,851·50	38,240 58	4,115·20	
		17,961·70	78,812 09	20,650·70	

ALBERTA.

Michel's reserve.....	Edmonton.....			6,076·56	
Sharphead.....	Ponoka.....			885·20	
Ermineskin reserve.....	Wetaskiwin.....	12·40	310 00		Ry. Rt. of way.
		12·40	310 00	6,961·76	

BRITISH COLUMBIA.

Lower Similkameen reserve..	Yale.....	182·59	4,597 95		Ry. Rt. of way.
Penticton.....	".....	350·00	1 00		"
Esquimalt.....	Esquimalt.....	2·46	257 07		"
		535·05	4,856 02		

General Remarks.

The land sold during the year amounted to 38,033·46 acres, which realized \$365,684·04. The quantity of surrendered land in the hands of the department was approximately 287,427·18 acres. The principal outstanding, on account of Indian Lands sold, amounted to \$372,113·59, a considerable portion of which has not yet become due.

SESSIONAL PAPER No. 27

CENSUS RETURN.

CENSUS RETURN of Resident and Nomadic Indians; Denominations to which they belong, with approximate number belonging to each Denomination, as well as the number of Pagans in the Dominion of Canada, by Provinces, for the Year ended June, 30, 1906.

PROVINCE OF ONTARIO.

Indians.	Census Return.	RELIGION.						UNDER 6 YEARS.		FROM 6 TO 15 YRS., INCLUSIVE.		FROM 16 TO 20 YRS., INCLUSIVE.		FROM 21 TO 65 YRS.		FROM 65 YEARS UPWARDS.	
		Anglican.	Presbyterian.	Methodist.	Roman Catholic.	Baptist.	(Congregation- alists.)	(Other Christian Beliefs.)	Pagan.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.
Algonquins, Golden Lake	101	..	..	..	101	..	..	..	..	14	13	18	14	12	3	2	1
" Renfrew, North	198	..	..	..	..	..	..	..	..	29	42	39	43	14	138	3	6
Chippewas of the Thames	474	216	1	255	..	2	..	..	16	25	23	26	40	37	154	18	23
" Walpole Island	594	297	..	297	10	..	..	..	..	20	22	25	27	33	73	16	14
" of Samia	310	46	..	264	..	..	..	..	..	14	13	5	6	4	19	6	11
" Kettle and Stony Point	92	20	..	72	..	..	..	..	..	12	5	6	6	32	28	8	13
" Georgina and Snake Island	113	..	..	113	..	..	..	..	..	19	16	15	22	12	67	8	11
" Rama	236	..	..	221	15	..	81	..	..	30	25	31	30	22	98	12	15
" Saugeen	396	4	..	275	36	..	..	..	..	25	21	38	32	23	112	3	7
" Nawash	389	10	..	299	130	..	..	..	..	18	82	29	19	16	54	5	12
" Peaseville	253	..	..	188	75	..	..	..	..	9	12	14	10	6	32	34	1
Iroquois & Algonquins of Wabigoon (Gibson)	140	..	..	140	..	..	..	..	..	37	42	46	40	23	68	4	1
Moravians of the Thames	348	..	..	..	..	..	..	..	..	25	33	24	11	5	46	38	3
Mississaugas of Mud Lake	185	..	..	185	..	..	..	..	..	8	9	7	6	4	21	19	3
" Rice Lake	87	..	..	87	..	..	..	..	..	3	2	2	6	1	10	11	4
" Seagug	35	..	..	35	..	..	..	..	..	22	20	30	13	7	63	61	7
" Altwick	240	6	..	231	3	..	..	..	..	10	18	16	16	14	72	66	8
" New Credit	263	16	..	219	9	..	19	..	..	61	86	24	14	80	331	10	39
Mohawks of the Bay of Quinte	1,320	1,300	15	..	..	..	5	..	..	..	..	..	..	..	..	..	..
Nomadic.																	

CENSUS RETURN.

CENSUS RETURN of Resident and Nomadic Indians, Denominations to which they belong, with approximate number belonging to each Denomination, as well as the number of Pagans in the Dominion of Canada, by Provinces, for the Year ended June 30, 1906.

PROVINCE OF ONTARIO *Continued.*

Indians.	Census Return.	RELIGION.								From 6 to 15 YEARS, 16 to 20 YEARS, 21 to 65 YEARS, INCLUSIVE.				From 65 YEARS UPWARDS.			
		Anglican.	Presbyterian.	Methodist.	Roman Catholic.	Baptist.	(Congregation- alist.)	Other Christian Beliefs.	Pagan.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.
Muskeg of the Thames.....	118	54	64							5	6	12	13	1	38	4	12
Ojibwas of the Thames.....	783	260	1	335		129		58		67	63	68	60	40	184	52	15
Pottawatamies of Walpole Island.....	189	73		92						9	10	17	18	15	34	1	8
Ojibbewas and Ottawas of Manitoulin and Cockburn Islands at :.....																	
Cockburn Island.....	53				53					4	3	9	4	5	9	4	3
Shesheganing.....	161				161					19	13	13	17	9	38	3	6
West Bay.....	338				338					36	27	31	33	11	86	3	6
Sucker Creek.....	105	80			14					9	9	9	9	6	29	5	4
South Bay.....	67				67					5	4	9	7	7	14	2	4
Shesheganing.....	100	80			20					10	6	7	11	5	23	3	4
Sucker Lake.....	13				13									1	1	2	1
Wikemikong (unceded).....	662				662					63	62	66	64	28	161	23	10
Wikemikong (unceded).....	7				1												
Ojibbewas of Lake Superior at :.....																	
Fort William.....	279				240					23	24	25	28	21	55	6	4
Red Rock or Helen Island.....	216	38			178					19	22	30	16	14	54	5	12
Pays Plat.....	44				44					1	4	8	4	2	12		1
Lake Nipigon, Gulf Bay and Island Point.....	452	16			225					48	49	70	49	32	99	2	4
Pic River.....	210				210					17	20	25	23	15	45		5
Long Lake.....	329	10			280					30	36	36	46	21	53	6	3
Michipicoten and Big Heads.....	358	176			182					16	20	29	37	35	79	10	8

6-7 EDWARD VII., A. 1907

SESSIONAL PAPER No. 27

[illegible]

6-7 EDWARD VII., A. 1907

CENSUS RETURN of Resident and Nomadic Indians; Denominations to which they belong, &c.—*Concluded.*
 PROVINCE OF ONTARIO—*Concluded.*

Indians.	Census Return.	RELIGION.						UNDER 6 YEARS.		FROM 6 TO 15 YEARS, INCLUSIVE.		FROM 16 TO 20 YRS., INCLUSIVE.		FROM 21 TO 65 YRS., INCLUSIVE.		FROM 65 YEARS UPWARDS.	
		Anglican.	Presbyterian.	Methodist.	Roman Catholic.	Baptist.	Congregationalist.	Other Christian Beliefs.	Pagan.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.
Northwest Angle No. 34.	15	1							15								
Big Island.	157	1							155	16	9	8	17	3	7	1	1
Assabasca.	153	2							146	15	10	11	18	35	37	2	1
Whitfish Bay.	49				5				45	4	5	3	12	31	40	3	4
Sheep Lake No. 40.	64				4				64	7	4	6	8	12	9	2	2
"	39								69	5	8	12	6	13	17	1	1
Indians at Ignace.	70				1				9	3	2	1	3	11	17	1	1
Indians of James Bay, Treaty No. 9 at—	44				35												
Abitibi.	146																
Matichewan.	79																
Mataganit.	98																
Flying Post.	117																
Cumpleau.	144																
New Brunswick House.	134																
Missinabi.	62																
Long Lake.	135																
Osnaburg.	400																
Fort Hope.	479																
Marten Falls.	113																
English River.	71																
Albany.	686																
Moose Factory.	344																
New Post.	36																
Total.	23,728	5,253	17	4,557	6,182	1020	99	370	2,987	1,570	1,589	2,000	1,997	1,221	1,131	4,947	5,076

NOTE. The following Indians in the James Bay Treaty, Treaty No. 9, are in Keewatin District, namely: Osnaburg, 283; Fort Hope, 419; Marten Falls, 87; Albany, 581; total, 1,370.

* No details.

6-7 EDWARD VII., A. 1907

CENSUS RETURN OF RESIDENT AND NOMADIC INDIANS; DENOMINATIONS TO WHICH THEY BELONG, &c.—*Continued.*
PROVINCE OF NEW BRUNSWICK.

Census return.	Indians.	RELIGION.					UNDER 6 YEARS.		FROM 6 TO 15 YRS., INCLUSIVE.		FROM 16 TO 20 YRS., INCLUSIVE.		FROM 21 TO 65 YRS., INCLUSIVE.		FROM 65 YEARS UPWARDS.	
		Anglican.	Presbyterian.	Methodist.	Roman Catholic.	Baptist.	Congregationalist.	Other Christian Beliefs.	Pagan.	Male.	Female.	Male.	Female.	Male.	Female.	Male.
295	295	295	295	295	295	295	295	295	295	29	31	13	6	74	63	10
35	35	35	35	35	35	35	35	35	35	3	4	4	4	9	7	1
24	24	24	24	24	24	24	24	24	24	1	1	2	1	7	7	1
211	211	211	211	211	211	211	211	211	211	19	23	8	10	52	49	10
144	144	144	144	144	144	144	144	144	144	6	9	10	10	41	31	5
53	53	53	53	53	53	53	53	53	53	5	4	3	4	14	14	2
32	32	32	32	32	32	32	32	32	32	3	3	5	.....	8	7	1
72	72	72	72	72	72	72	72	72	72	8	9	6	10	13	20	1
63	63	63	63	63	63	63	63	63	63	6	5	3	2	17	16	1
116	116	116	116	116	116	116	116	116	116	11	9	8	5	24	22	5
110	110	110	110	110	110	110	110	110	110	12	10	14	3	24	18	4
66	66	66	66	66	66	66	66	66	66	7	9	5	4	15	15	.....
11	11	11	11	11	11	11	11	11	11	1	1	2	1	3	3	.....
34	34	34	34	34	34	34	34	34	34	2	4	3	4	5	3	2
16	16	16	16	16	16	16	16	16	16	1	3	1	1	4	3	.....
101	101	101	101	101	101	101	101	101	101	9	7	13	6	23	20	2
71	71	71	71	71	71	71	71	71	71	7	10	11	2	14	10	1
42	42	42	42	42	42	42	42	42	42	5	6	1	2	9	7	1

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PROVINCE OF NOVA SCOTIA.													
Analects of Victoria County at :	185	186	187	188	189	190	191	192	193	194	195	196	197
Tobique	185	186	187	188	189	190	191	192	193	194	195	196	197
Analects of Madawaska County at :	48	48	5	3	5	7	8	4	8	7	5	5	1
Edmundston	1,792	1,792	156	156	157	179	186	91	80	409	307	56	51
Total	1,792	1,792	156	156	157	179	186	91	80	409	307	56	51
Municipalities of Cape Breton County at :													
Cariboo Marsh (reserve)	85	86	7	7	4	10	12	8	6	18	19	1	1
North Sydney	56	56	7	7	3	9	12	10	2	10	11	1	1
Esksom	134	134	11	11	16	10	8	17	15	23	32	2	2
Municipalities of Antigonish County at :													
Summerside	25	25											
Alton (reserve)	80	80											
Pomquet (reserve)	55	55											
Municipalities of Guysborough County at :													
Guysborough	60	60	17	17	19	25	30	18	15	43	40	8	5
Municipalities of King's County at :													
Cambridge (reserve)	10	10											
Berwick	10	10											
Brooklyn	15	15											
Blue Mount	5	5											
Caspereaux	5	5	6	6	7	10	8	11	10	10	8	4	2
Hawkeport	10	10											
Palmerston	7	7											
Aylesford	4	4											
Middleton	8	8											
Municipalities of Shelburne County at :													
Sable River	13	13											
Shelburne River	7	7	2	2	3	3	1	1	1	11	4		
Clyde River	7	7											
Larrington River	2	2											
Municipalities of Hants County at :													
Indian Brook (reserve)	100	100	6	6	9	7	4	9	15	22	21	4	3
Municipalities of Cumberland County at :													
Franklin Manor (reserve) & vicinity	51	51	3	3	2	5	3	7	8	10	10	2	1
Springhill Junction	9	9	2	2	1	1	1	1	1	2	2	1	1
Amherst	6	6	3	3	2	1	1	2	1	1	1	1	1
River Hebert	11	11	1	1	2	1	1	1	1	1	1	1	1
Pugwash	9	9	1	1	2	1	1	1	1	1	1	1	1
West Southampten	8	8	2	2	2	2	1	1	1	1	1	1	1
Municipalities of Inverness County at :													
Whycocomagh (reserve)	123	123	7	7	16	14	18	17	2	27	25	2	2
Malbagawatch (reserve)	49	49	3	3	3	9	8	1	1	9	11	3	3
Municipalities of Annapolis County	64	64	8	8	4	9	7	1	2	18	8	2	2
Municipalities of Richmond County at :													
Chapel Island (reserve)	123	123	13	13	12	20	15	8	1	25	25	1	1
Municipalities of Victoria County at :													
Middle River (reserve)	100	100	10	10	8	11	9	1	6	24	25	2	1

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CENSUS RETURN of Resident and Nomadic Indians; Denominations to which they belong, &c.—*Continued.*PROVINCE OF NOVA SCOTIA—*Continued.*

Census Return.	Indians.	RELIGION.							Under 6 Years.		From 6 to 15 Years, INCLUSIVE.		From 16 to 20 Years, INCLUSIVE.		From 21 to 65 Years, INCLUSIVE.		From 65 Years UPWARDS.		
		Anglican.	Presbyterian.	Methodist.	Roman Catholic.	Baptist.	Congregationalist.	Other Christian Beliefs.	Pagan.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.
52	Milton				52					3	1	7	4	10	6	2	2		
10	Mill Village				10					1		2		2	2				
13	Wild Cat (reserve).				13					1		1		4	4		1		
5	Caledonia				5					1				1	2				
Municipalities of Lunenburg County at :																			
58	New Germany (reserve).				58					5	5	4	4	12	13	1	2		
14	Bridgewater				14					1	2	1	1	2	3				
10	Lunenburg Town				10					1	1	1	2	3					
8	Gold River (reserve).				8						1	1		2	3		1		
Municipalities of Pictou County at :																			
135	Fisher's Grant (reserve)				135					13	7	14	10	35	34	5	3		
33	Indian Island (reserve)				33					1	3	3	5	7	8	1	2		
Municipalities of Colchester County at :																			
101	Millbrook (reserve)				101					10	3	11	8	27	23	6	6		
112	Municipalities of Digby County				112					9	11	15	8	25	20	5	1		
Municipalities of Halifax County at :																			
28	Sheet Harbour.				28					2	3	2	3	7	7	4	1	1	
56	Elmsdale.				56					3	1	5	3	18	13	1	3		
34	Enfield.				34					3	3	1	2	11	9				
10	Wallington				10					1	2	2	1	3	1				
18	Fall River.				18					2	1	1	1	3	1				
56	Bedford				56					2	7	3	2	6	6	3	1		
60	Dartmouth				60					3	3	2	4	4	9	10	13	3	
80	Municipalities of Yarmouth County.				80					2	3	8	6	22	22	3	2		
2,148	Total				2,148					175	179	243	216	468	432	75	51		

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CENSUS RETURN OF RESIDENT AND NOMADIC INDIANS; DENOMINATIONS TO WHICH THEY BELONG, &c. *Continued.*
PROVINCE OF BRITISH COLUMBIA. *Continued.*

Indians.	Census return.	RELIGION.								UNDER 6 YEARS.		FROM 6 TO 15 YEARS, INCLUSIVE.		FROM 16 TO 20 YRS., INCLUSIVE.		FROM 21 TO 65 YRS., INCLUSIVE.		FROM 65 YEAR UPWARDS.	
		Anglican.	Presbyterian.	Methodist.	Roman Catholic.	Baptist.	Congregation- alist.	Other Christian Beliefs.	Pagan.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.		
NORTHWEST COAST AGENCY.																			
Masset.	360	360								40	43	34	40	12	94	84	4	75	3
Skidegate.	239		239							22	22	14	14	6	78	70	5	5	5
Kincolth.	250									16	17	25	34	7	74	33	3	3	3
Kittex and Andegway.	78									6	5	7	7	3	21	21	2	2	2
Lackasap.	144	142								15	17	13	19	5	33	34	3	3	3
Kitwintshiith.	59								59	4	4	4	5	3	18	17	1	1	1
Aiyash.	160									19	18	15	12	7	42	39	2	2	2
Kidlaelamax.	123								123	4	5	13	11	7	4	37	34	3	3
Port Simpson.	708		708							57	73	82	75	18	185	161	20	22	5
Medlakatha.	198									27	19	23	25	10	46	40	1	1	1
Kilbatha.	205									13	13	27	16	14	52	51	1	1	1
Hardley Bay or Kilbatha.	81		81							8	8	10	9	3	21	21	1	1	1
China Hat or Kitason.	78		78							8	6	10	9	2	22	20			
Port Essington.										15	16	25	27	5	47	40	5	4	4
Kitsumiklum.	191		191																
Kitselas.																			
Killope.	70								70	3	5	11	5	2	21	15	3	4	4
Kilimuh.	275		275							20	20	28	30	9	82	69	3	3	3
Bella Bella.	327		327							33	32	27	24	16	89	79	6	7	7
Kimsquit.	65								65	3	2		3	2	28	25			
Bella Coala.																			
Talamey.	223		30						193	16	16	20	12	5	85	58	5	5	5
Owekayno.	102		102							9	4	6	10	2	33	33			
Total	3,936	1,393	2,033						510	338	345	394	385	1,099	985	73	86		

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KOOTENAY AGENCY.									
St. Mary's	216	216	28	18	21	10	5	15	50
Tolmie Plains	60	60	4	1	7	1	3	16	18
Lower Columbia Lake	82	82	8	9	10	1	20	19	19
Lower Kootenay (Flat Bow)	166	166	8	6	18	6	43	44	44
Kimbaskets (Shuswap tribe)	62	62	6	6	5	2	9	14	14
Arrow Lake (West Kootenay)	25	25	2	1	1	2	7	7	7
Total	611	611	57	56	62	23	17	140	152
KAMLOOPS-OKANAGAN AGENCY.									
Adam's Lake	194	194	15	16	20	9	9	54	52
Ashcroft	45	45	3	3	2	2	2	15	15
Boonpartie	160	160	15	14	14	6	6	43	44
Boothroyd	151	151	12	12	9	6	6	49	46
Boston Bar	146	61	10	10	12	5	5	46	46
Cook's Ferry	185	185	13	13	14	7	7	53	62
Duchuan's Creek	122	122	12	12	11	8	8	26	27
Kamloops	242	242	20	20	20	9	9	65	65
Kanaka Bar	55	55	3	3	3	3	3	15	15
Lytton	460	460	37	36	39	24	26	121	120
Nicomen	49	49	4	4	4	2	2	11	11
Nicola (Lower)	365	329	25	25	30	19	18	100	98
" (Upper)	190	190	16	16	15	10	10	48	48
Neskamith	152	152	14	12	11	6	6	48	43
North Thompson	130	130	11	10	10	11	10	33	32
Okanagan	232	232	12	12	13	11	10	75	77
Oregon-Jack Creek	19	19	2	2	2	3	3	5	5
Osayons	65	65	5	5	5	3	3	19	19
Penticton	158	158	20	20	18	9	9	33	32
Little Lake Shuswap	88	88	10	10	8	3	3	21	20
Sumikameen (Upper)	47	47	4	3	2	3	3	11	13
" (Lower)	132	132	10	10	11	8	7	36	36
Siska Flat	30	30	1	1	2	1	1	12	10
Skuppu	17	17	1	1	1	1	1	6	6
Spallumcheen	150	150	17	16	15	8	8	34	32
Spuzzum	158	90	12	12	13	8	8	43	40
Cold Water (Lower)	110	110	11	10	11	6	6	24	24
Total	3,855	1,645	315	308	317	187	181	1,055	1,047
KAWAKWETCH AGENCY.									
Kasimoo	71	71	1	1	1	4	1	35	37
Klawitsis	165	165	9	7	1	1	1	49	51
Kwatsino	21	21	2	3	1	1	1	5	5
Kwawshela	35	35	4	4	1	1	1	12	11
Kwawwath	75	75	5	5	3	3	2	26	24
Kwialkal	26	26	3	1	1	1	1	7	7
Mamathikella	108	108	8	8	2	2	2	50	50
Total	715	715	53	47	10	15	10	147	139

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CENSUS RETURN OF Resident and Nomadic Indians; Denominations to which they belong, &c.—*Continued.*
PROVINCE OF BRITISH COLUMBIA *Continued.*

Indians.	Census Return.	RELIGION.								UNDER 6 YEARS.		FROM 6 TO 15 YEARS, INCLUSIVE.		FROM 16 TO 20 YEARS, INCLUSIVE.		FROM 21 TO 65 YEARS, INCLUSIVE.		FROM 65 YEARS UPWARDS.	
		Anglican.	Presbyterian.	Methodist.	Roman Catholic.	Baptist.	Congregationalist.	Other Christian Beliefs.	Pagan.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.
KWAKWELTH AGENCY <i>Continued.</i>		90	134						90	2	2	4	4	6	1	33	34	1	1
Newakta.....										14	6	5	2	50	40	2	4		
Ninukish.....									69	8	3	2	3	24	22	1	3		
Nuwitti.....									94	11	14	26	17	73	58	6	7		
Tanakeuk.....	226								39	3	1	4	1	17	9	1	1		
Tsawantiano.....										4	4	6	1	2	2	2	2		
Wawaitsum.....	39									5	4	7	7	26	26	1	1		
Wiwaiakum.....	72																		
Wiwaiakui.....	86																		
Total.....	1,257	572		158					527	79	73	73	62	51	15	406	25	35	
WEST COAST AGENCY.																			
Ahonsait.....	251		60		10				181	15	19	29	24	13	4	67	77	2	1
Chayoquot.....	251			100					31	14	8	15	21	7	4	62	74	10	16
Chicklesit.....	67				50				17	5	5	10	11	11	3	19	14	2	3
Elhatsait.....	95			1	20				74	2	6	12	12	1	28	29	1	4	3
Uchuellet.....	140		90						50	11	14	18	13	5	3	34	37	2	3
Hesquiaht.....	146				146				17	6	18	18	13	9	6	32	36	4	5
Uchucklesit.....	36		2		7				27	4	3	3	3	3	2	7	11	1	1
Kelsenah.....	72			10					52	2	2	8	3	3	6	23	18	2	9
Kyuquot.....	257				150				107	5	9	14	18	4	6	92	96	8	5
Mataditlache.....	62				24				38	1	1	8	5	1	15	25	3	3	5
Nootka.....	153				100				53	5	4	9	12	6	4	46	57	5	5
Nitinaht.....	198			160					16	17	7	15	24	7	1	42	55	11	9

CENSUS RETURN of Resident and Nomadic Indians; Denominations to which they belong, &c.—*Continued.*
 PROVINCE OF BRITISH COLUMBIA—*Continued.*

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Indians.	Census return.	RELIGION.								UNDER 6 YEARS.		FROM 6 TO 15 YEARS, INCLUSIVE.		FROM 16 TO 20 YEARS, INCLUSIVE.		FROM 21 TO 65 YEARS, INCLUSIVE.		FROM 65 YEARS UPWARDS.	
		Anglican.	Presbyterian.	Methodist.	Roman Catholic.	Baptist.	Congregationalist.	Other Christian Beliefs.	Pagan.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.
BABINE AND UPPER SKEENA RIVER AGENCY - Continued.																			
Monticetown (Lochalap).....	158				158					8	8	12	13	7	8	48	48	3	2
Fort Babine.....	149				149					6	6	13	12	9	9	44	45	2	2
Old Fort Babine.....	134				134					6	6	12	13	7	7	40	40	2	1
Yucutec (Portage between Babine and Stuart Lakes).....	16				16					1	1	2	2	2	1	4	3	2	3
Thahee.....	64				64					5	5	6	7	4	4	14	14	2	1
Pinthe.....	42				42					2	2	5	4	4	3	10	11	1	1
Grand Rapids.....	26				26					2	2	3	3	3	3	4	5	1	1
Tsistnahli (Lac Trembleur).....	19				19					1	1	2	3	2	1	4	5	4	1
Stuart's Lake Village.....	192				192					8	8	17	18	11	11	56	55	4	4
Stella.....	58				58					4	4	7	7	4	4	12	13	1	1
Fraser's Lake Village.....	64				64					4	4	7	8	5	5	14	15	1	1
Stony Creek Village.....	107				107					5	5	10	11	8	8	28	28	1	1
Fort George Village.....	124				124					6	6	12	14	5	6	36	37	1	2
Tsistlattho (Black Water).....	65				65					3	3	6	6	4	4	20	20	1	1
McLeod's Lake.....	99				99					5	5	12	12	9	9	23	22	1	1
Fort Graham (Nomadic).....	91				91					5	6	10	10	5	5	24	24	1	1
Connolly Lake.....	121				121					6	6	11	10	9	10	33	32	2	2
Nan-a-nee (two bands north of Connolly Lake, semi-nomadic).....	154				154					8	8	14	14	9	9	43	43	4	2
Total.....	2,972	627	279	279	1,842	..	98	126	135	141	287	395	164	167	826	836	56	55	1
FRASER RIVER AGENCY.																			
Aitchelitz.....	4			4											1	2			

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CENSUS RETURN OF RESIDENT AND NOMADIC INDIANS; DENOMINATIONS TO WHICH THEY BELONG, &c. *Continued.*
PROVINCE OF MANITOBA.

Indians.	Census Return.	Religion.						From 6 to 15 YEARS, INCLUSIVE.		From 16 to 20 YEARS, INCLUSIVE.		From 21 to 45 YEARS, INCLUSIVE.		From 45 YEARS UPWARDS.	
		Anglican.	Presbyterian.	Methodist.	Roman Catholic.	Baptist.	(Congregationalist.	Other Christian Beliefs.	Pagan.	Male.	Female.	Male.	Female.	Male.	Female.
Chippewas and Crees of Treaty No. 1, at:															
Rosseau River, including Rapids	183				67				116	12	14	19	17	10	47
Swan Lake, including Indian Gardens	93								93	6	7	4	10	2	23
Long Plain	135								135	14	16	15	17	3	28
St. Peter's	1,159	858			139	83	39		40	110	110	108	112	61	277
Brokenhead River	166	124			20				22	9	11	14	15	7	44
Fort Alexander	478	205			237				36	50	55	35	36	31	112
Sandy Bay	290	9			272				9	25	24	39	30	21	61
Total, Treaty No. 1	2,504	1,196			735	83		39	431	226	237	234	237	135	599
Siox at Portage-la Prairie, Chippewas and Crees of Treaty No. 2, at:	121		101						20	3	9	5	12	7	31
Lake Manitoba	116	22			87			1	6	12	7	13	11	8	30
Elkh and Flow Lake	58	11			47					7	4	6	9	2	13
Fairford	190	108			34		8			15	18	28	22	8	38
Little Saskatchewan	120	96			24					12	12	8	15	11	28
Lake St. Martin	154	107					20		27	11	18	24	12	12	43
Crane River	41	6			6				29	4	2	3	8	3	14
Waterhen River	48				48					6	2	3	5	1	13
Total, Treaty No. 2	727	390			246			29	62	67	61	90	74	45	163
Chippewas, Saulteaux and Crees of Treaty No. 3, at: Buffalo Bay	26								26	2		3	1	1	9

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Treaty No. 4.

BATTLE AGENCY.

Keweenaw.	138	107	31	4	8	18	20	5	7	20	43	3	1
Waywasecapi.	175	69	37	17	13	28	14	3	10	39	39	6	6
Gambler	13		13	1	2	3	2			2	3		
Rolling River	98	18	8	8	10	10	5	2	2	28	30	3	2
Birdtail (Sioux).	74	63		10	4	5	9			19	18	3	3
Oak River (Sioux).	268	74	2	21	16	21	27	9	12	67	69	10	13
Oak Lake	64	29		35	2	6	10	1		19	12	4	2
Turtle Mountain.	10			10		1	1	2		2	3		
Total.	840	74	91	66	56	94	88	20	35	265	217	30	29
Pine Creek.	212	2	210	21	21	20	36	15	8	35	47	3	3
Shoal River (including Steep Point Rock, Swan Lake, Dog Island, Dawson Bay, ½ mile west of Shoal River).	163	130	13	17	17	18	18	8	6	31	37	4	9
Total, Treaty No. 4.	1,217	296	314	107	94	132	142	43	49	271	301	37	41

Chippewas, Saulteaux and Crees of
Treaty No. 5, at:

Black River	63			5	11	6	1	5	3	10	13	5	1
Hollowwater River.	97		22	10	12	8	8	5	6	17	17	6	1
Bloodvein River.	54			8	5	5	4	4	2	7	11	1	
Loon Straits													
Fisher River.	411			33	33	47	15	23	26	91	99	7	7
Jackhead River.	67	37		5	7	7	4	6	4	12	15	3	3
Borens River.	295			31	19	46	35	26	18	53	56	6	5
Poplar River.	149		24	19	10	20	18	10	7	28	33	2	2
Noway House.	520			34	25	69	69	36	36	105	111	4	4
Cross Lake	359		90	33	32	45	40	28	22	59	86	3	3
Little Grand Rapids (Borens River).	143	43		11	11	23	16	12	7	25	29	2	4
Pekangikum	129			129	14	19	13	19	9	19	25	1	2
Grand Rapids (Crees and Saulteaux).	118	118		11	18	10	13	4	4	31	24	1	2
Chenuawawin (Crees).	161			21	22	18	12	4	5	36	41	1	2
Moose Lake (Crees and Saulteaux).	135	134		14	16	12	9	7	8	26	32	5	6
The Pass.	416	396	8	36	43	31	12	29	29	81	92	15	18
Shoal Lake (Crees).	70			6	5	12	13	4	4	14	12		
Red Earth	126	95		15	15	17	12	8	1	24	21	5	8
Cumberland	166	133	13	10	24	18	24	6	5	32	41	3	3
Total, Treaty No. 5.	3,479	1,282	157	316	330	409	387	226	194	671	788	69	86

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QU'APPELLE AGENCY.		165	30	90		45	19	15	13	10	10	5	33	53	5	2
Piapot.....	220	100		100		120	23	22	19	20	8	10	46	58	9	3
Standing Buffalo (Sioux).....	131	27	27	89	.....	13	17	15	8	16	4	2	27	30	2	10
Pasquaht.....	85	24	.....	11	.....	47	11	19	1	3	4	4	11	21	6	2
Muscawpetung.....	102	20	.....	16	.....	36	12	11	3	8	5	5	27	23	2	3
Peepokeosis.....	58	18	.....	26	.....	14	1	11	10	7	2	1	9	11	2	1
Okanaos.....	39	5	.....	10	.....	24	4	6	3	4	3	3	6	5	2	3
Star Blanket.....	60	11	.....	27	.....	22	6	8	1	8	3	3	13	11	3	1
Little Black Bear.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total.....	860	135	.....	402	.....	323	93	113	64	76	29	33	172	212	31	27
ASSINIBOINE AGENCY.		.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Carry-the-kettle.....	203	116	.....	33	.....	54	15	16	11	12	17	19	13	51	6	10
Sioux at Moosejaw (non-treaty).....	110	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total.....	313	116	.....	33	.....	54	15	16	11	12	17	19	43	51	6	10
TOUCHWOOD HILLS AGENCY.		.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Muscawpetung.....	140	1	.....	76	.....	63	16	11	16	10	5	9	30	35	1	4
George Gordon.....	196	121	.....	19	.....	56	21	17	16	15	9	7	54	47	4	6
Day Star.....	75	.....	.....	75	.....	75	10	9	7	9	2	2	16	16	3	3
Poor Man.....	109	7	.....	8	.....	94	13	25	5	7	5	2	22	26	3	4
Total.....	520	129	.....	103	.....	288	60	63	44	41	18	18	122	124	11	17
Treaty No. 6.		.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
DUCK LAKE AGENCY.		.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Nut Lake (Yellow Quill).....	217	.....	.....	2	.....	215	17	26	35	19	14	12	43	45	3	3
One Arrow.....	95	.....	.....	75	.....	20	7	7	21	4	9	1	17	20	2	1
Okenosis.....	27	5	.....	19	.....	3	5	3	1	4	.....	.....	5	9	.....	.....
Beardy.....	144	.....	.....	102	.....	25	9	17	24	17	2	.....	25	35	5	3
John Smith.....	148	118	.....	.....	.....	.....	10	18	16	18	9	5	33	31	3	2
James Smith.....	237	222	.....	2	.....	13	26	24	24	25	13	9	49	54	7	6
Kimstine.....	77	.....	.....	.....	.....	77	10	9	10	10	3	5	14	13	.....	1
Total.....	945	375	17	200	.....	853	84	104	131	97	50	12	186	212	20	19
ARLTON AGENCY.		.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
William Twatt.....	151	30	2	7	.....	112	26	10	19	8	10	7	31	40	3	3
Petoquaky.....	107	5	.....	102	.....	.....	11	11	10	14	5	6	24	24	1	1
Misawaks.....	129	6	86	37	.....	.....	12	13	14	11	3	3	34	36	1	2
Abitkahoop.....	213	191	1	14		1	18	27	26	27	11	10	40	49	3	4
Kemotayon.....	120	631		23		34	13	10	14	10	8	7	25	28	1	1

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CENSUS RETURN OF Resident and Nomadic Indians : Denominations to which they belong, &c.—Continued.

PROVINCE OF SASKATCHEWAN—Continued.

Indians.	Census Return.	RELIGION.						UNDER 6 YEARS, INCLUSIVE.		FROM 6 TO 15 YEARS, INCLUSIVE.		FROM 16 TO 20 YRS., INCLUSIVE.		FROM 21 TO 65 YRS., INCLUSIVE.		FROM 65 YEARS UPWARDS.		
		Anglican.	Presbyterian.	Methodist.	Roman Catholic.	Baptist.	Congregationalist.	Other Christian Beliefs.	Pagan.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	
CARLTON AGENCY— <i>Concluded.</i>																		
Pelican Lake Indians.....	65	9			4				52	10	1	6	4	9	15	2	2	
Wahsapaton (Sioux, non-treaty).....	103	27							76	2	3	15	13	2	30	6	4	
James Roberts (Lac la Ronge).....	523	No details								46	66	79	88	25	80	102	6	
William Charles (Montreal Lake).....	197	No details								18	10	28	27	10	40	50	3	
Total.....	1,608	329	94		187				278	150	154	211	202	75	308	26	30	
BATTLEFORD AGENCY.																		
Mosquito.....	54	6			6				65	4	7	6	4	4	19	3	2	
Bear's Head.....	22																	
Lean Man.....	1																	
Red Pheasant.....	158		107			43			8	10	16	16	13	10	9	37	6	3
Sweet Grass.....	87		35			40			12	6	8	6	6	3	3	23	1	3
Poundmaker's.....	108	8			98			2	8	11	12	11	5	7	27	19	4	
Little Pine and Luckymann.....	122	49			46			27	8	8	10	6	9	8	28	26	5	
Moosomin.....	133	38			60			35	12	9	8	10	10	8	34	36	3	
Thunderchild.....	117	40			56			21	6	8	8	9	5	5	32	32	3	
Kopwaywakemum.....	84				71			13	13	8	8	9	5	4	13	23	3	
Total.....	886	283			420			183	67	75	76	63	56	52	213	236	25	
ONTON LAKE AGENCY.																		
Seekaskootch.....	286	56			140			90	37	45	18	19	7	9	64	70	4	
Sweet Grass (attached).....	25	25							2	5	2				5	8	1	

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Wemistioschiasis	87	18	66	3	1	6	8	10	4	2	21	23	57	1	3
Oonapowayaw	105	28	49	18	10	10	12	7	1	1	1	25	39	1	5
Puskewickewem	29	6	23	.....	3	2	2	1	.....	.....	1	4	30	1	4
Kochewem	135	4	131	.....	9	24	15	4	14	1	1	31	30	1	6
Kinosayo (Chipewyan)	275	.....	275	.....	35	30	23	17	10	20	37	57	73	3	7
Total	942	147	684	111	100	119	80	61	33	41	209	245	14	40	.....
PROVINCE OF ALBERTA.															
EDMONTON AGENCY.															
Enoch	111	.....	15	.....	8	11	8	10	3	1	34	25	1	1	1
Michael	94	.....	94	.....	9	6	11	10	3	9	15	24	3	3	4
Alexander	177	.....	177	.....	22	18	14	12	8	8	41	48	3	3	3
Joseph	147	.....	117	.....	15	20	16	17	8	7	28	57	3	6	6
Paul (White Whale Lake)	164	.....	164	.....	21	20	14	11	12	10	30	33	1	9	.....
Orphans at St. Albert	1	.....	1	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
Total	694	.....	179	.....	75	75	63	60	35	38	148	157	14	29	.....
SADDLE LAKE AGENCY.															
Saddle Lake	114	.....	101	.....	11	13	15	12	14	10	32	36	21	1	3
Blue Quill	113	.....	8	.....	17	12	8	9	12	11	24	23	3	3	.....
James Soorum	335	.....	253	.....	39	35	23	24	21	22	73	79	1	21	.....
Lac la Piche	9	.....	9	.....	1	.....	2	1	2	.....	2	1	.....	.....	.....
Chipewyan	84	.....	81	.....	1	.....	10	6	8	4	15	20	.....	.....	.....
Beaver Lake	105	.....	105	.....	11	11	11	5	.....	6	26	33	.....	.....	.....
Total	787	.....	302	.....	76	81	69	57	67	63	172	184	.....	.....	.....
HEDDYM AGENCY.															
Sanson	373	.....	241	.....	58	54	37	29	8	5	80	91	.....	.....	.....
Emmiskin	175	.....	175	.....	20	31	17	10	3	.....	40	30	.....	.....	.....
Louis Bull	80	.....	66	.....	18	13	4	5	3	.....	16	19	.....	.....	.....
Montana (Little Bear)	63	.....	46	.....	10	3	8	3	4	1	13	19	.....	.....	.....
Total	691	.....	323	.....	55	106	101	66	47	18	6	149	179	6	13
Treaty No. 7.															
BLACKFOOT AGENCY.															
Running Rabbit	371	.....	.....	.....	124	26	24	31	18	28	42	92	109	8	16
Yellow Horse	432	150			982	30	18	40	40	52	33	98	100	2	13
Total	803	150			1063	56	42	71	58	80	72	190	209	16	29

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PROVINCE OF ALBERTA.

EDMONTON AGENCY.													
Edmonton Agency ..	694	179	515			75	63	60	35	148	157	11	29
Sudbule Lake ..	787	362	425	.....	.....	81	69	57	67	63	172	8	10
Hobbema ..	694	323	313	.....	55	106	66	47	18	6	119	6	13
Blackfoot ..	803	150	250	.....	403	56	42	58	80	52	190	16	29
Surrey ..	203	32	19	.....	161	13	9	11	8	9	57	6	10
Stoney ..	669	660	.....	.....	68	66	77	79	20	17	144	8	17
Poegan ..	193	68	.....	.....	56	51	43	44	21	14	116	12	23
Blood ..	1,181	150	.....	.....	881	103	101	113	52	15	280	11	46
Grand total	5,512	400	1,524	1,808	.....	563	526	330	391	244	1,256	81	177

NORTHWEST TERRITORIES.

Treaty No. 8	33,308	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Non treaty Indians where no agents	165	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Grand total	3,473	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Ungava ..	5,060												
Franklin district (formerly Arctic Coast)	2,500												
Esquimaux ..													

No details.

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GRAND RECAPITULATION.

CENSUS RETURN of Resident and Nomadic Indians; Denominations to which they belong, with approximate number belonging to each Denomination; as well as the number of Pagans in the Dominion of Canada, by Provinces, for the year ended June 30, 1906.

Indians.	Census Return.	Religion.						UNDER 6 YEARS.		FROM 6 TO 15 YEARS, INCLUSIVE.		FROM 16 TO 20 YEARS, INCLUSIVE.		FROM 21 TO 55 YEARS, INCLUSIVE.		FROM 55 YEARS UPWARDS.	
		Anglican.	Presbyterian.	Methodist.	Roman Catholic.	Baptist.	Congregation- alist.	Other Chris- tian Beliefs.	Pagan.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.
Ontario.....	23,728	17	4,557	6,182	1,020	99	370	2,987	+16	1,570	1,589	2,000	1,997	1,221	1,131	4,947	5,076
Quebec.....	11,307	5	565	7,718	2,148	175	179	831	874	831	835	788	457	1,700	1,631	157	205
Nova Scotia.....	2,148	..	..	1,732	..	..	..	..	..	156	157	173	186	91	80	468	432
New Brunswick.....	1,732	..	..	..	..	..	..	..	..	19	27	20	26	14	16	73	72
Prince Edward Island.....	284	..	..	..	..	..	..	..	..	1,748	1,711	1,908	1,870	1,068	936	5,704	5,656
British Columbia.....	24,997	4,364	427	3,285	11,270	88	147	2,924	..	721	731	873	853	437	441	1,747	1,850
Manitoba.....	8,074	3,074	390	1,675	2,373	..	80	2,224	..	681	773	773	731	335	323	1,544	1,785
Saskatchewan.....	7,425	1,315	683	..	..	..	..	1,780	..	553	526	530	469	301	244	1,236	1,375
Alberta.....	5,312	400	..	1,524	1,808	..	..	..	..	..	..	..	..	..	..	..	..
Northwest Territories	3,473	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Yukon.....	*3,060	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Franklin district (formerly Arctic coast).....	*2,500	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Arctic district.....	*1,289	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Mackenzie ".....	*4,149	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Yukon Territory.....	*3,302	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Keelewin district.....	*4,464	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Grand total.....	109,394	14,525	1,522	11,546	34,967	1,103	99	597	10,551	6,497	6,524	7,361	7,136	4,129	3,783	17,848	18,244

NOTE. — Religion of 74,910 Indians known; religion of 34,484 Indians unknown.

* No details.

+ Adventists.

AGRICULTURAL AND INDUSTRIAL STATISTICS

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AGRICULTURAL AND INDUSTRIAL STATISTICS.

REALTY OF INDIANS.

Agency.	LANDS AND SOURCES FROM WHICH INDIANS DERIVE THEIR SUPPORT.					PUBLIC BUILDINGS, PROPERTY OF THE BAND.										
	Cleared but not under cultivation.	Under actual cultivation.	Number engaged in farming.	Number engaged in trapping and fishing.	Number engaged in other industries.	Number engaged in stock raising.	Threshers.	Engines.	Other Machinery.	Churches.	Council Houses.	School Houses.	Drivng Sheds.	Other Buildings.	Ferries.	Value of Public Properties, &c.
ONTARIO.																
Grand River Superintendency—Six Nations.	23,974	10,722	405	10		408					1	10				16,500 00
Perry Sound Superintendency.		1,317										1				4,450 00
New Credit (Mississaugas) Agency.	1,930	3,700	45		35				5		1	5				8,130 00
Wabigoon Island Agency.	33,425	1,005	55	35		25				2	1	3				4,050 00
Samia	2,265	1,442	69		62		1	1		2	1	3				6,880 00
Caradoc	4,459	10,512	60							2	3	6				4,725 00
Moravian	1,195	970	70	12	13	70					1	1		13		1,700 00
Manitowaning	5,990	2,715	165	65	115				1	7	3	9		1		19,300 00
Gore Bay	3,845	1,530	240	25	294		1			3	1	5				6,700 00
Thessalon	350	223		7	306					6	1	4		1		4,590 00
Sault Ste. Marie	7,748	1,570		160	235						2	4				10,300 00
Port Arthur	342	327	31							1		7				1,800 00
Sturgeon Falls		375										2				4,700 00
Golden Lake	200	50									1	7				1,040 00
Tyendinaga	9,600	6,300	270	1	242				1	3	1	4		1		8,500 00
Lake Sturgeon	539	232	12	10		8	1			1	1	1		1		2,500 00
Cape Croker	3,500	1,500	150	30	159	50		1		2	1	3		4		10,200 00
Saugeen	1,025	1,145	75		120					1	1	3		9		18,000 00
Alvick	100	2,498	7							1	1	1		6		6,250 00
Mud Lake	300	250	9	60						1	1	1		1		7,300 00
Rice Lake	855	575	14	9						1	1	1		1		1,000 00
Kana	400	760	17	6	31					1	1	1		1		3,500 00
Christian Island	300	850	40	15	25	40										
Seveng	120	620	4	7	8	1				1						500 00
Indians of Christian Island band residing on Manitoulin Island.																
Kemora Agency.	1,038	132		154	68					1		4				725 00
Fort Frances Agency.	454	144			113	17				1	1	6				3,750 00
Savanne	1,808	120		186	61					1		6				700 00
Total	108,363½	51,704	1,681	792	1,897	619	5	2	6	54	26	86	30	56	3	160,990 00

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Kenora	Agency																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		</
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AGRICULTURAL AND INDUSTRIAL STATISTICS—Continued.

PERSONACTY OF INDIANS.

Agency.	AGRICULTURAL IMPLEMENTS, VEHICLES, &c.										
	Ploughs.	Harrows.	Seed Drills.	Cultivators.	Land Rollers.	Mowers.	Reapers and Binders.	Horse Rakes.	Fanning Mills.	Threshing Machines.	Tool Chests.
ONTARIO.											
Grand River Superintendency—Six Nations.	368	290	66	138	90	158	108	141	188	3	44
Parry Sound Superintendency.	29	25				3	1		5		
New Credit (Mississaugas) Agency.	37	27	7	19	7	15	10	13	15	1	1
Wabigoon Island Agency.	58	54	2	68	4	33	7	28	31	1	1
Sarnia.	79	67	12	38	54	23	20	34	1	26	20
Caradoc.	135	117	43	116	22	65	31	49	48	1	62
Moravian.	66	60	10		4	14	6	16	10		4
Manitowaning.	173	105		6		27	8	21	10	3	51
Gore Bay.	54	50	2		2	13	3	7	3	1	7
Thessalon.	14	12			3	6		13	17	1	6
Sault Ste. Marie.	65	51		10		1					6
Port Arthur.	16	5						3			
Sturgeon Falls.	11	4							2		10
Golden Lake.		6							2		
Tyendinaga.	129	100	40	75	30	38	30	70	54	1	40
Lake Simcoe.	13	12	3	2	1	3	3	4	3		7
Cape Croker.	40	35	2	6	3	15	1	25	20	4	4
Saugeen.	57	42	8			8	1	12	6		50
Alnwick.	23	16	1	10	5	4	4	2	9	1	5
Mud Lake.	15	11	3	4	3	1	2	4	4		1
Rice Lake.	12	14	3	3	1	2	2	3	5		1
Rama.	20	18	1	1	1	1	1	2	4	1	1
Christian Island.	75	50	6	6	8	3	1	6	4	1	6
Seagog.	7	2	1			1		1	3		2
Indians of Christian Island band residing on Manitoulin Island.		9									
Kemora Agency.	27	15							1		
Fort Frances Agency.	3	4									
Savanne Agency.											
Total.	1,532	1,201	207	501	238	434	234	454	445	34	403

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QUEBEC.											
Lake of Two Mountains Agency	50	58	5	17	16	8	24	8	6	25	3
Chouchnawaga Agency	400	202	17	50	10	50	150	20	14	25	8
St. Regis	117	95	8	92	4	16	55	8	6	60	3
Viger											
St. Francis											
Maria	5	3									
Restigouche	5	6									
River Desert	36	30	1	21	4	2	16	2	1	8	
Jeanne Lanette	25	25	1	8	5	1	5	9	1		
Becancour	4	5		1	1		1				
Timiskaming	2	3			2		2	1	1	8	
Berthois	8	10			3		2				
Mingan	1										
Lake St. John											
	22	30		1	2	1	7	9	10		1
Total	675	467	32	171	24	78	264	57	41	108	

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QUEBEC.

Lake of Two Mountains Agency	418	17	50	47	49	12	42	10,534 30
St. Catharines Agency	550	150	188	204	59		84	17,185 00
St. Regis	290	70	28	60	21		75	9,800 00
Viger								
St. Francis	274	8		8	3	2	9	1,332 00
St. Maria	120	5			6			1,150 00
Restigonche	199	10	11	37	5	4	121	4,700 00
River Desert	500	10	12	25	5	6	19	4,909 00
Jeune Lorette	150	4	5	9	6	1	3	500 00
Becancour	60	4	1	2	2	2	2	600 00
Tiniskaming	250	3	1	8		1		1,256 00
Bersimis		2	4	2			2	91 00
Mingan								
Lake St. John		18	25	28	28	20	8	4,457 00
Total	2,811	301	332	430	185	48	365	56,514 30

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	44	47	4	8	11	26	33
Fort Frances Agency		12	8			17	8
Savanne Agency							
Total	547	2,833	170	89	743	2,533	2,998
							432
							305
							165
QUEBEC.							
Lake of Two Mountains Agency.....							
Canguinawaga "	4	96	14		1	133	111
St. Regis "	60	285	25		30	300	200
Viger "	6	169	22		40	300	190
St. Francis "	1	5					
Maria "		3	1	1	9	12	7
Restigouche "	12	33	6	2	9	40	11
River Desert "	5	34	5		6	45	92
Jeanne Lorette "		1	1	1	1	20	20
Becancour "	1	5	1			15	8
Timiskaming "		11	4		1	17	4
Bassimis "	3					6	2
Mingan "							
Lake St. John "	15	27	7	1	26	66	40
Total	106	673	86	8	123	976	689
							86
							386
							48

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QUEBEC.										
	1,321	1,904	2,114	1,211	1,901	35,434	458,344 35	326	189	1,799
Kenora Agency.....							1,440 00		16	355
Fort Frances ".....							5,030 00		7	254
Savanne ".....							1,190 00	1		346
Total.....	1,321	1,904	2,114	1,211	1,901	35,434	458,344 35	326	189	1,799
Lake of Two Mountains Agency.....	41	117	118		12	546	13,891 50	4	22	7
Coughnawaga Agency.....	76	250	30	50	30	600	20,402 50		36	1
St. Regis ".....	75	151	122	70	90	850	25,000 00		68	
Viger ".....									2	6
St. Francis ".....	4	8				57	1,220 00		16	11
Maria ".....	1	6				90	1,200 00		8	8
Restigouche ".....	12	62				125	7,500 00		4	47
River Desert ".....	14	18	38			300	4,358 00		3	47
Jenne Lorette ".....		10	1			300	1,500 00			6
Becancour ".....	2	10				42	1,030 00		1	1
Tiniskaming ".....	1					143	1,948 00			16
Bersimis ".....						12	345 00	1		104
Mingan ".....								4		155
Lake St. John ".....	30	34				200	6,006 00			175
Total.....	256	665	309	120	132	3,205	84,401 00	9	152	584

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AGRICULTURAL AND INDUSTRIAL STATISTICS—Continued.
PERSONALTY OF INDIANS *Continued.*

Agency.	GENERAL EFFECTS.					HOUSEHOLD EFFECTS.		Value of Real and Personal Property.
	Value of.					Value of.		
	Rifles.	Shot Guns.	Nets.	Steel Traps.	Tents.	%	cts.		%	cts.
ONTARIO.								
Grand River Superintendency—Six Nations	15	129	.....	280	3	900 00	34,000 00	1,613,189 25
Parry Sound Superintendency.	57	50	121	330	.....	2,850 00	14,350 00	119,505 00
New Credit (Mississaugas) Agency	5	14	1	23	.....	89 50	7,265 00	242,677 50
Wapole Island Agency.	15	55	1	1,200	.....	1,775 00	14,000 00	306,625 00
Sarnia	10	21	6	3	.....	660 00	9,000 00	415,380 00
Caradoc	42	50	12	547	7	430 00	47,200 00	508,403 00
Moravian	21	13	12	45	.....	280 00	32,600 00	184,080 00
Manitowaning	38	129	356	622	82	8,215 00	26,550 00	373,015 00
Gore Bay	22	53	126	217	4	2,803 00	14,745 00	99,449 00
Thessalon	9	78	206	891	63	4,607 00	6,868 00	104,240 00
Sault Ste. Marie	73	167	148	1,030	104	5,860 00	17,600 00	129,321 00
Port Arthur	124	251	256	305	167	11,926 00	5,200 00	2,501,948 00
Sturgeon Falls	56	94	172	1,030	100	6,066 00	11,200 00	273,897 00
Golden Lake	10	10	12	170	10	400 00	560 00	10,034 00
Tyondinaga	20	25	2	200	.....	500 00	42,000 00	780,930 00
Lake Simcoe	9	11	8	120	16	850 00	2,800 00	51,000 00
Cape Croker	25	20	200	30	5	320 00	32,000 00	186,474 00
Sauguen	42	85	23	127	20	1,100 00	5,000 00	121,480 00
Alnwick	10	20	1	677	22	1,200 00	7,407 00	145,005 65
Mud Lake	7	28	.....	1,900	16	1,430 00	9,000 00	65,650 00
Rice Lake	5	9	.....	700	2	1,050 00	4,800 00	45,625 00
Rama	20	16	.....	350	22	850 00	1,000 00	82,000 00
Christian Island	60	30	60	500	40	1,700 00	6,000 00	280,000 00
Scougog	2	7	1	287	6	1,700 00	1,045 00	47,218 10
Indians of Christian Island band residing on Manitoulin Island.	.....	.....	.....	.....	.....	.....	.....	.....
Kenora Agency	59	232	330	5,648	181	12,694 80	12,232 25	169,841 30
Fort Frances "	58	84	184	2,750	69	4,550 00	4,130 00	249,206 00
Savanne "	51	226	399	4,638	204	11,571 50	15,647 75	134,378 50
Total	865	1,907	2,637	24,020	1,143	85,063 80	385,500 00	9,362,742 30

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QUEBEC.									
Lake of Two Mountains Agency	7	29	9	202	3	497 00	3,632 00	111,031 80	
Conghamawaga	12	9	2	47	3	795 00	54,490 00	645,612 50	
St. Regis	16	21	20	430		700 00	14,000 00	306,400 00	
Viger		20		284		185 00	1,100 00	3,750 00	
St. Francis	3	23		615	21	1,075 50	11,975 00	146,302 50	
Maria	15	15		120	2	600 00	2,000 00	23,250 00	
Restigouche	2	7		90	3	1,500 00	13,500 00	43,146 00	
River Desert	22	96	15	700	35	2,983 00	3,735 00	154,256 00	
Jeune Lorette	30	38		250	10	800 00	9,000 00	76,950 00	
Beaucourt	6			15		81 00	150 00	5,611 00	
Tiniskaming	4	2	25	406	20	1,092 00	3,795 00	32,768 00	
Bersimis	20	12	29	1,289	76	4,495 00	5,312 00	45,186 00	
Mingan	23	140	133	2,230	125	9,141 00	6,485 00	29,312 00	
Lake St. John	111	139	150	7,200	200	21,770 00	8,000 00	139,547 00	
	175	240							
Total	428	791	363	13,898	498	46,314 50	137,294 00	1,763,122 80	

6-7 EDWARD VII., A. 1907

AGRICULTURAL AND INDUSTRIAL STATISTICS—Continued.

AGRICULTURE, SEASON 1905.

GRAIN, ROOTS AND FODDER.

Agency.	Wheat.		Oats.		Barley.		Corn.		Pease.	
	Acres Sown.	Bushels Harvested.	Acres Sown.	Bushels Harvested.	Acres Sown.	Bushels Harvested.	Acres Sown.	Bushels Harvested.	Acres Sown.	Bushels Harvested.
ONTARIO.										
Grand River Superintendency—Six Nations.	1,240	15,010	2,010	90,431	375	7,893	398	6,302	307	3,331
Parry Sound Superintendency.				1,050		150		400		500
New Credit (Mississaugas) Agency.	101	1,744	341	11,447	55	885	11	289	49	795
Walpole Island Agency.	31	345	110	3,029	5	51	220	3,495	3	18
Sarnia.	127	2,460	299	3,616	281	808	352	2,375	20	547
Caradoc.	212	3,978	890	28,039	753	1,920	320	17,952	105	714
Moravian.	90	900	250	7,500	40	1,290	165	6,650	10	150
Manitowaning.	112	1,545	3801	10,536	18	245	301	1,033	3391	6,322
Cove Bay.	5	140	1201	3,039	2	55	81	345	122	3,260
Thessalon.			69	1,386			17	658	18	388
Sault Ste. Marie.	2	28	104	1,880	7	80	10	130	17	285
Port Arthur.			30	905						
Sturgeon Falls.			20	540						
Golden Lake.			10	200						
Tyendinaga.	300	6,000	1,500	45,000	400	8,000	130	7,800	5	250
Lake Simcoe.	21	230	113	2,260			2	50	8	100
Cape Croker.	100	1,800	223	7,875	13	200	40	2,000	200	6,000
Sauguen.	36	290	102	1,800			22	800	20	180
Altwick.	44	545	78	2,770	30	540		35	621	1,135
Mud Lake.	30	500	150	2,900			3	65	20	315
Rice Lake.	87	1,730	50	1,500			4	78	100	1,950
Rama.	15	315	220	6,600			15	320	20	1,300
Christian Island.	40	650	150	3,500			80	1,200	60	1,000
Saugeoy.				675						
Indians of Christian Island band residing on Manitoulin Island.	18	250	49							
Kemora Agency.							1	72		

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Fort Frances Agency Savanne	QUÉBEC									
	2,611	38,500	7,271	240,339	1,049	22,027	1,525	53,130	1,397	33,100
Lake of Two Mountains Agency	34	241	291	5,031	21	252	37	893	2	25
Caughnawaga Agency	130	1,925	775	20,170	50	1,300	200	3,000	15	300
St. Regis			500	10,540	28	332	200	7,800	56	800
Viger										
St. Francis			37	487			21	462		
Maria	4	27	25	500						
Restigouche	8	140	180	4,600	6	195			3	102
River Desert	3	60	120	2,500			2	50	15	300
Jeanne Lorette										
Picapecaque			22	275	1	25	1	23	2	12
Timiskaming	2	12	30	515						
Pasquiau										
Mingan			350	4,600	14	260			42	300
Lake St. John	60	500								
Total	241	2,905	2,332	17,218	120	2,564	522	11,812	135	1,989

6-7 EDWARD VII., A. 1907

AGRICULTURAL AND INDUSTRIAL STATISTICS—Continued.

AGRICULTURE, SEASON 1905.

GRAIN, ROOTS AND FODDER—Continued.

Agency	Rye.		Buckwheat.		Beans.		Potatoes.		Carrots.	
	Acres Sown.	Bushels Harvested.	Acres Sown.	Bushels Harvested.	Acres Sown.	Bushels Harvested.	Acres Sown.	Bushels Harvested.	Acres Sown.	Bushels Harvested.
ONTARIO.										
Grand River Superintendency—Six Nations.	185	2,351	26	396	33	495	191	8,031	64	756
Parry Sound Superintendency						150		4,700		115
New Credit (Mississaugas) Agency.						10		576		
Wabigoon Island Agency	9	145	6	90	4	328	125	2,655	6	119
Sarnia			20	368	20	290	754	2,009	11	114
Caradoc		11			6	1,119	126	12,090	64	700
Moravian	15	300	20	306	50	800	35	2,100		
Manitowaning			25	250	7	265	394	23,769	4	250
Gore Bay					1	55	714	4,385		
Thessalon						18	94	7,180		
Sault Ste. Marie			12	25	1	1	184	7,552	34	170
Port Arthur							52	10,400		
Sturgeon Falls							10	1,700	1	30
Golden Lake						20	5	250		
Tyrendinaga	300	7,500	670	13,400	7	150	600	12,000	10	500
Lake Simcoe			26	200	2	30	13	250	14	25
Cape Croker					3	90	50	2,000	2	200
Sauguen					3	50	34	2,000		50
Abwick	9	100	18	600		23	174	1,343		24
Mad Lake			8	140	2	28	40	3,120	2	330
Rice Lake		65					20	1,250		
Rama	3				5	70	1,200	2,100	2	170
Christian Island					5	75	120	4,500		
Sauguen	14	168	10	60			3	114		
Indians of Christian Island band residing on Manitoulin Island										
Kenora Agency							46	7,739		
Fort Frances Agency							17	2,225		

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Savanne Agency	585	10,640	830½	15,835	190½	4,066	2,398½	274	4,357	56	3,553
Total											
QUEBEC.											
Lake of Two Mountains Agency											
Chaudière Agency			45	918	10	143	53		4,895		
St. Régis			90	2,700	7	200	125		2,800		
Viger	8	125	40	850	16	445	360		10,750	10	400
St. Francis											
Maria			7½	68	1½	13½	21		872		
Restigouche							5		450		
River Desert			14	4,800	1½	11	50		5,600	1	25
Jeanne Lorette			12	400	1½	40	30		5,000		100
Bécancour					1½	7					12
Timiskaming			1	6	1	1	4		280		
Parsinuis							10		1,100		
Mingum							10		400		
Lake St. John			60	1,100	2	30	300		6,000		30
Total	8	125	269½	10,842	38½	890½	968		36,147	12½	567

6-7 EDWARD VII., A. 1907

AGRICULTURAL AND INDUSTRIAL STATISTICS—Continued.
AGRICULTURE, SEASON 1905—Continued.

Agency.	GRAIN, ROOTS AND FODDER—Continued.				NEW LAND IMPROVEMENTS.						
	Turnips.		Other Roots.		Hay.		Other Fodder.	Land Cleared.	Land Broken.	Land Cropped for first time.	Land Fenced.
	Acres Sown.	Bushels Harvested.	Acres Sown.	Bushels Harvested.	Cultivated.	Wild.					
ONTARIO.											
Grand River Superintendency—Six Nations.	4	596	8 ¹	2,061	6,941	Tons.	2,891	Acres.	Acres.	Acres.	
Parry Sound Superintendency.		430		180	295	155		39	15	30	75
New Credit (Mississaugas) Agency.	4	50	3	160	856		292	2	5	15	20
Walpole Island Agency.	8	152	4	33	227	481	350	5			
Sarnia	3 ¹	481	2	24	588	176	130				
Caradoc	1 ¹	260	9 ¹	1,524	1,502		841	47	6	38	4
Moravian			6	1,200	500		900	8	4		4
Manitowaning	10	2,129	2	50	2,352	59	20	1	12	12	
Gore Bay		40	2	415	756	5	39	14 ¹	14 ¹	14 ¹	14 ¹
Thessalon		100			90	41	15	40	40	40	40
Sault Ste. Marie	7	618	5	125	398	310	20	3			
Port Arthur					78	59			2	2	2
Sturgeon Falls	4	260		40	55	160		10			
Golden Lake					10	15	12		4	4	6
Tyendinaga	30	1,200	5	1,000	2,303	20	1,500				
Lake Simcoe	4 ¹	1,400	1 ¹	50	80	15	12		1	2	12
Cape Croker	4	800		300	300	50	100	5	10	15	15
Sauguen	8	600	6	800	200	6	100	15		10	8
Albion	1 ¹	2,010		15	84		92				
Mud Lake	5	1,480	6	490	70		30	3			4
Rice Lake	14	2,400	3	420	60		20	5	5		12
Rama	2	380	1	60	380	10	20	5		5	5
Christian Island	10	700			275	80	50			50	50
Seagow	2	400			31						
Indians of Christian Island band residing on Manitoulin Island.											
Kenora Agency.	2 ¹	312	9 ¹	404		404		5			
Fort Frances Agency.			4	355	64	187					

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Savanne	497	3	229	192	7,352	270 ¹	74 ¹	241 ¹	267 ¹
Total	28,095	81	9,635	2,425					
QUEBEC.									
Lake of Two Mountains Agency	3								
Conghamawaga Agency	12								
St. Roch									
Viger	6								
St. Francis									
Maria									
Restigouche	3								
River Desert	8								
Jeune-Lorette									
Beauport									
Timiskaming									
Bersimis									
Mingan									
Lake St. John	1								
Total	30 ¹	19	1,391	759	1,452	79 ¹	48 ¹	37 ¹	29

6-7 EDWARD VII., A. 1907

AGRICULTURAL AND INDUSTRIAL STATISTICS--Continued.
PROGRESS DURING THE FISCAL YEAR 1905-6.

Agency.	BUILDINGS ERRECTED.										
	Dwellings.			Shanties.	Barns.	Horse Stables.	Driving Sheds.	Cattle Stables.	Pig Sties.	Store Houses.	
	Stone.	Brick.	Frame.								Log.
ONTARIO.											
Grand River Superintendency—Six Nations.....											
Perry Sound Superintendency.....				4	5	9	6	1			
New Credit (Mississaguas) Agency.....				1		1			1	1	6
Walpole Island.....				4	2			2			
Sarnia.....											
Caradoc.....	2	2							2		
Moravian.....			1	1							
Manitowaning.....											
Gore Bay.....											
Thessalon.....											
South Ste. Marie.....				3	4	4					
Port Arthur.....				2	5						
Sturgeon Falls.....				1	1						
Golden Lake.....				1	19	4	6	2	9	6	
Tyendinaga.....				4							
Lake Simcoe.....											
Cape Croker.....				2	1				3		
Saugeen.....				2	3						
Alnwick.....											
Mud Lake.....											
Rice Lake.....										2	
Rama.....											
Christian Island.....											
Seagug.....											
Indians of Christian Island band residing on Manitoulin Island.....											
Kenora Agency.....					39						
Fort Frances Agency.....				2	8						
Savanne Agency.....					12						
Total.....	2	2	27	101	4	16	12	5	15	9	9

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		QUERREY.									
21	Lake of Two Mountains Agency	1									
7	Caulimawaga Agency	1									
1	St. Regis										
11	Vigor	5									
1	"	5									
8	St. Francis										
	Marie										
	"										
	Restigouche										
	River Desert	1									
	"										
	Jeune Lorette	1									
	"										
	Becancour	1									
	"										
	Timiskaming	1									
	"										
	Bersimis	1									
	"										
	Mingau										
	"										
	Lake St. John										
	"										
	Total	13	21	4	7	6	1	21			

6-7 EDWARD VII., A. 1907

AGRICULTURAL AND INDUSTRIAL STATISTICS—Continued.
PROGRESS DURING THE YEAR 1906.

Agency.	BUILDINGS ERECTED.			INCREASE IN VALUE.			Total Value of New Land Improvements and Buildings.
	Root Houses.	Milk Houses.	Corn Cribbs.	Value of New Land Improvements	Value of Buildings Erected.		
				%	%	%	
ONTARIO.							
Grand River Superintendency—Six Nations.		3	2		9,175 00		9,175 00
Parry Sound Superintendency.				370 00			370 00
New Credit (Mississaguas) Agency.				255 00	275 00		530 00
Wapole Island		2	4	450 00	1,850 00		2,300 00
Sarnia							
Caradoc				985 00	2,000 00		2,985 00
Moravian			3	125 00	300 00		425 00
Manitowaning				80 00	100 00		180 00
Gore Bay				145 00	275 00		420 00
Thessalon				800 00			800 00
Sault Ste. Marie				35 00	650 00		685 00
Port Arthur				250 00	1,337 00		1,587 00
Saugeen Falls				150 00	300 00		450 00
Golden Lake	1	3			200 00		200 00
Tyondinaga					1,200 00		1,200 00
Lake Simcoe	1	1		120 00	20 00		140 00
Cape Croker				350 00	1,450 00		1,810 00
Saugeen				500 00	500 00		1,000 00
Alnwick							
Mud Lake				20 00			20 00
Rice Lake				60 00			60 00
Rama				70 00			70 00
Christian Island				1,000 00			1,000 00
Seugog							
Indians of Christian Island band residing on Manitoulin Island.							
Kenora Agency				20 00	1,700 25		1,720 25
Fort Frances Agency					1,250 00		1,250 00
"					300 00		300 00
Savanne							
Total.	2	9	9	5,795 00	22,882 25		28,677 25

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QUEBEC.

Lake of Two Mountains Agency

12-1	Caughnawaga	1	1	40 00	140 00	180 00
11-1	St. Regis			100 00	1,090 00	1,190 00
11-2	Viger		9	55 00	4,375 00	4,425 00
12-2	St. Francis					
12-3	Maria			280 00	150 00	430 00
12-4	Restigouche			10 00	60 00	70 00
12-5	River Desert			40 00	100 00	140 00
12-6	Jeune Lorette			650 00	400 00	1,050 00
12-7	Beaucourt				500 00	500 00
12-8	Timiskaming			30 00		30 00
12-9	Bessimis			45 00	250 00	295 00
12-10	Mingou					
12-11	Lake St. John			20 00		20 00
Total		1	10	1,765 00	7,065 00	8,830 00

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AGRICULTURAL AND INDUSTRIAL STATISTICS—Continued.
SOURCES AND VALUE OF INCOME.

Agency.	Value of Beef Sold also of that Used for Food.		Value of Farm Pro- ducts includ- ing Hay.		Wages Earned.		Received from Land Rentals.		THE ESTIMATED VALUE OF FISH AND MEAT USED FOR FOOD IS INCLUDED IN THESE COLUMNS.				Earned by other Industries.		Total Income of Indians.	
	¢	cts.	¢	cts.	¢	cts.	¢	cts.	Earned by Fishing.	¢	cts.	Earned by Hunting and Trapping.	¢	cts.	¢	cts.
ONTARIO.																
Grand River Superintendency—Six Nations.			119,896	45	140,268	00	3,571	00	3,300	00	3,150	00	3,450	00	263,735	45
Perry Sound Superintendency	1,100	00	6,750	00	13,300	00	2,328	50	15	00	25	00	1,030	00	20,430	00
New Credit (Mississaugas) Agency	3,500	00	6,102	00	8,350	00	2,535	00	830	00	835	00	10,600	00	18,970	50
Wapole Island Agency			7,300	00	24,000	00	2,535	00	462	00	75	00	2,800	00	47,085	00
Sarnia	2,401	50	14,200	00	15,200	00	5,332	25	350	00	425	00	7,259	00	35,322	00
Carleton Place	1,000	00	37,968	00	68,592	00	257	00	990	00	350	00	2,300	00	122,927	75
Moravian	150	00	9,800	00	4,000	00	6,350	00	6,645	00	8,950	00	27,850	00	18,607	00
Manitowaning	1,975	00	35,298	00	45,245	00	300	00	775	00	1,500	00	3,125	00	94,345	00
Chico Bay	125	00	6,123	00	33,093	00	4,000	00	1,750	00	716	00	1,296	00	64,207	00
Thessalon			11,080	00	41,000	00			2,550	00	9,620	00	2,100	00	43,409	00
Sault Ste. Marie			8,736	00	7,080	00			3,050	00	15,000	00	2,100	00	30,466	00
Port Arthur			1,800	00	11,300	00			100	00	4,100	00	3,700	00	23,950	00
Sturgeon Falls	150	00	300	00	3,220	00			200	00	100	00	250	00	4,120	00
Golden Lake	4,500	00	52,445	00	30,000	00	4,679	89	290	00	100	00	2,125	00	91,924	89
Tyrindaga	200	00	2,295	00	1,900	00	271	00	790	00	160	00	8,430	00	7,741	00
Lake Simcoe	1,750	00	7,350	00	3,800	00			3,500	00	200	00	8,000	00	22,050	00
Cape Croker	600	00	4,770	00	17,850	00	8,200	00	700	00	100	00	8,000	00	40,220	00
Saugen	281	00	5,073	40	8,402	00	1,618	69	389	00	290	00	1,881	00	17,985	09
Altwick	1,160	00	3,750	00	1,800	00	50	00	600	00	1,000	00	1,100	00	10,060	00
Mud Lake	560	00	2,500	00	800	00	112	00	200	00	1,200	00	350	00	5,722	00
Rice Lake	300	00	6,300	00	4,800	00			400	00	400	00	4,000	00	16,200	00
Rama	1,000	00	10,000	00	6,000	00			2,000	00	1,000	00	7,000	00	27,000	00
Christian Island	292	20	711	20	252	00	150	25	19	00	249	00	562	00	2,235	65
Seigoz																
Indians of Christian Island band residing on Manitoulin Island																
Kemora Agency			4,913	45	20,718	10			7,888	35	17,370	20	7,632	48	58,522	58
Port Frances Agency			2,640	00	23,600	00			15,000	00	14,800	00	5,200	00	61,240	00
Savanne			2,691	55	14,580	15			10,925	19	19,918	82	3,841	12	51,956	83
Total	21,044	70	374,380	05	558,256	25	39,755	58	63,338	54	102,235	02	122,571	60	1,281,601	74

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AGRICULTURAL AND INDUSTRIAL STATISTICS—Continued.
REALTY OF INDIANS.

Agency.	LANDS AND SOURCES FROM WHICH INDIANS DERIVE THEIR SUPPORT.						PUBLIC BUILDINGS, PROPERTY OF THE BAND.									
	Cleared but not under Cultiva- tion.	Acres.	Under actual Cultivation.	Number engaged in Farming.	Number engaged in Hunting, Trapping and Fishing.	Number engaged in (Other) Industries.	Number engaged in Stock Raising.	Threshers.	Other Machinery.	Churches.	Council Houses.	School Houses.	Driving Sheds.	Other Buildings.	Ferries.	Values of Public Properties, &c.
NEW BRUNSWICK.																
Richibucto Superintendency.	1,370	980	217	190		202				6	2	2		4		7,750 00
Fredericton "	311	366	15	44		94	10			1	2	1		3		5,400 00
Total	1,681	1,346	232	234		296	10			7	4	3		7		13,150 00
PRINCE EDWARD ISLAND.																
Prince Edward Island Superintendency	210	381	33	33						1						5,800 00
NOVA SCOTIA.																
Annapolis County.																
Shelburne	222	31														
Digby													1			
Yarmouth	200	48								1						800 00
King's	8	1	1	22		22										
Queen's	200	200		10		40										
Halifax	50	12														
Hants	212	88		40		20				1		1		1		1,600 00
Colchester	20	15		18		17				1						285 00
Cumberland	225	25	16													150 00
Pictou	65	55														4,500 00
Antigonish and Guysborough Counties.	195	185														
Richmond County	140	180	33	25		15	27			1	1	1			1	100 00
Inverness	580	536	14	17	5	20										16,500 00
Victoria	200	60	10	5		15								1		1,000 00
																850 00

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Cape Breton (Sydney) County.....	16		2	54		1	1	1	2,400 00
Laurelburg County.....	300	450	10	20		1	1	1	300 00
Cape Breton (Eskasoni) County.....	1,000	800	.....	.....	1	1	1	1	300 00
Total.....	3,633	2,658½	84	223	27	7	1	5	28,785 00
BRITISH COLUMBIA.									
Cowichan Agency.....	5,394	3,413	25	108	.....	13	1	.....	10,816 00
West Coast ".....	336	56	2,157	350	.....	.....	.....	.....	500 00
Kwakwaka.....	302½	9½	719	103	.....	.....	.....	.....	2,650 00
Lower Fraser ".....	3,498	3,713	527	587	396	.....	.....	.....	38,100 00
Williams Lake Agency.....	53,504	1,852	669	329	133	43	5	1	34,100 00
Kamloops-Okanagan Agency.....	236,106	31,170	879	230	.....	21	.....	.....	27,350 00
Kootenay Agency.....	38,436	1,560	134	50	113	23	4	.....	25,000 00
Northwest Coast Agency.....	.....	.....	.....	.....	.....	5	.....	.....	.....
Habine and Upper Skeena River Agency.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Cassiar Agency.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total.....	343,623	41,473½	2,234	1,330	612	1	13	96	138,546 00
MANITOBA.									
Chandehoye Agency.....	50,783	463	280	300	192	.....	.....	.....	31,100 00
Portage la Prairie Agency.....	14,459	981	37	125	95	.....	.....	.....	2,800 00
Manitowapah ".....	39,707	306	.....	.....	23	1	1	3	7,725 00
Norway House ".....	13,128	2,873	.....	.....	.....	8	11	10	23,550 00
The Pas ".....	13,588	65	.....	.....	.....	10	2	15	3,625 00
Birds ".....	48,612	4,520½	101	150	108	.....	1	4	4,280 00
Total.....	183,277	9,208½	418	635	323		44	4	73,080 00

* No returns received from agent. † No returns.

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AGRICULTURAL AND INDUSTRIAL STATISTICS—Continued.
REALTY OF INDIANS.

Agency.	PRIVATE FENCING AND BUILDINGS.															Value of Private Fencing.	Value of Private Buildings.	Total Value of Private Fencing and Buildings.
	Acres Fenced.	Dwellings, Stone.	Dwellings, Brick.	Dwellings, Frame.	Dwellings, Log.	Shanties.	Barns.	Horse Stables.	Driving Sheds.	Cattle Stables.	Pig Sties.	Storehouses.	Root Houses.	Milk Houses.	Corn Cribbs.			
NEW BRUNSWICK.																		
Richibucto Superintendency	930			177		37	67	50		54	21		49	1			2,075 00	21,400 00
Fredericton	537			116	39	22	23	22	7	22	30		10	9			1,975 00	24,975 00
Total	1,467			293	39	59	90	72	7	76	51		59	10			4,050 00	46,375 00
PRINCE EDWARD ISLAND.																		
Prince Edward Island Superintendency.	281			49			26	23		23	12	4	41	6			1,640 00	7,640 00
NOVA SCOTIA.																		
Annapolis County.	30			12	2	5	2			2	2						60 00	960 00
Shelburne	9			5	1		1										25 00	425 00
Digby				27	1	5	5										200 00	1,650 00
*Yarmouth																		
King's	60			12		3	2										100 00	1,100 00
Queen's	140			16			2				3						300 00	1,300 00
Halifax	6			6		40	3	3		7	3						2,175 00	3,400 00
Hants	80			16			7	1		7							400 00	3,000 00
Colchester	15			20		1	3			3	3						10 00	1,010 00
Cumberland	12			22		5	4	4									20 00	620 00
Pictou	50			23		6	11	4									50 00	1,850 00
Antigonish and Guysborough Counties.	200			42		8	15					6						
Richmond County	100			15		10	9	9		9				1			200 00	1,550 00
Inverness	700			26		8	15				3		2	4			350 00	3,350 00
Victoria	180			15		4	8										500 00	3,500 00
Cape Breton (Sydney) County	23			13		9	1										25 00	825 00
Lambert County	480			14	2		10				5						500 00	1,275 00

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Cape Breton (Esquasoni) County	1,000	16	2	6	15	21	4	5	21	16	6	2	5	2,740 00	23,250 00	23,815 00
Total	3,118 ¹	312	8	110	110	21	4	5	70	1	10	1	5	10,940 00	82,315 00	184,255 00
BRITISH COLUMBIA.																
Cowichan Agency	5,102	554	10	22	213	2	2	...	...	...	...	...	...	1,480 00	88,900 00	90,380 00
West Coast "	56	379	...	310	2	2	...	...	...	...	...	...	...	190 00	14,065 00	14,255 00
Kwakiwalth "	19	79	...	108	...	...	...	...	...	...	...	...	...	15,007 00	130,306 00	165,303 00
Lower Fraser "	4,823	762	62	301	299	274	185	...	269	92	8	51	1	6,550 00	423,360 00	483,910 00
Williams Lake Agency	21,876	5	472	18	24	536	21	2	105	74	88	287	6	53,000 00	254,900 00	307,900 00
Kamloops Okanagan Agency	104,050	124	851	18	24	536	21	2	105	74	88	287	6	9,300 00	11,735 00	21,035 00
Kootenay Agency	1,560	30	139	86	25	21	...	...	18	...	...	22	...	...	...	...
* Northwest Coast	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
* Babine and Upper Skeena River Agency	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Cassiar Agency	...	...	25	...	...	...	...	...	...	...	...	...	...	...	10,000 00	10,000 00
Total	140,486	1,933	1,559	905	563	1,082	...	2	462	201	107	377	7	187,467 00	644,871 00	832,338 00
MANITOBA.																
Claudebroye Agency	2,950	3	449	...	...	85	...	...	214	...	65	10	8	11,770 00	84,850 00	96,620 00
Portage la Prairie Agency	3,385	...	59	21	...	38	...	...	34	...	12	12	3	3,250 00	4,300 00	7,550 00
Manitowish Agency	256	...	282	32	...	136	...	...	205	...	110	8	47	3,33 00	17,550 00	17,903 00
Norway House "	356	...	402	...	...	4	...	...	148	...	...	...	...	1,403 00	28,425 00	29,828 00
The Pas Agency	951	1	209	...	...	7	...	...	36	...	9	...	...	...	...	...
Birtle "	13,380	33	85	59	2	96	...	13	106	6	73	24	4	1,685 00	25,055 00	26,740 00
Total	20,422	37	1,486	112	2	306	...	13	743	6	270	54	62	18,461 00	160,180 00	178,641 00

No returns received from agent.

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AGRICULTURAL AND INDUSTRIAL STATISTICS—Continued.
PERSONALTY OF INDIANS.

Agency.	AGRICULTURAL IMPLEMENTS, VEHICLES, &c.										
	Ploughs.	Harrows.	Seed Drills.	Cultivators.	Land Rollers.	Mowers.	Reapers and Binders.	Horse Rakes.	Fanning Mills.	Threshing Machines.	Tool Chests.
NEW BRUNSWICK.											
Richibucto Superintendency	24	22		7	3	8		5			19
Fredericton	34	36		18	4	1		9	4		
Total	58	58		25	11	9		14	4		19
PRINCE EDWARD ISLAND.											
Prince Edward Island Superintendency	10	11		4	3						6
NOVA SCOTIA.											
Annapolis County	2	2									
Shelburne "											
Digby "											
Yarmouth "											
King's "	2	1									
Queen's "	1	1									
Halifax "	1										
Hants "	2	2		5		3		3			
Colchester "											
Cumberland "											
Pictou "	3	2	1	1	1					1	3
Antigonish and Guysborough Counties	3	3								4	3
Richmond County	4	3								3	
Inverness "	10	5	2			2		2		39	
Victoria "	3	3						1			
Cape Breton (Sydney) County											
Lunenburg County	4	3			1	1					
Cape Breton (Esquimaux) County	5	3				3					
Total	40	28		8	2	9		6		1	38

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BRITISH COLUMBIA.										
Cowichan Agency.....	158	99	2	3	45	8	27	7	14	
West Coast ".....	1	1			1					
Kwakiwalth ".....	1									
Lower Fraser ".....	108	89	1	4	25	3	6	.....	3	.....
Williams Lake.....	177	71	.....	83	46	5	28	16	1	.....
Kamloops-Okanagan Agency.....	500	351	3	9	119	20	98	26	4	.....
Kootenay ".....	100	27	.....	274	34	4	23	2	1	.....
*Northwest Coast.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
*Robine and Upper Skeena River Agency.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
*Gassiar.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total.....	1,045	638	4	18	360	40	182	51	23	.....
MANITOBA.										
Clandeboye Agency.....	77	48	.....	2	51	6	39	2	.....	10
Portage la Prairie Agency.....	45	20	6	.....	22	4	19	3	.....	4
Manitowish ".....	23	18	.....	.....	41	.....	23	.....	.....	8
Norway House.....	19	29	.....	.....	.....	.....	.....	.....	.....	9
The Pas.....	15	20	.....	.....	2	.....	2	.....	1	37
Birtle.....	188	104	39	11	68	50	60	9	2	1
Total.....	397	239	45	11	187	60	143	14	3	69

* No return received from agent.

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Lambert County..... Cape Breton (Eskasoni).	15	5	2	11	3	215 00
Total	625	49	39	56	22	1,280 00
BRITISH COLUMBIA.						
Cowichan Agency.....	4,059	182	2	13	9	32,965 01
West Coast "	930	3				1,630 00
Kwakwaka "	620					735 00
Lower Fraser "	2,110	104	6	9	4	16,223 00
Williams Lake Agency	658	110		153	11	25,349 50
Kamloops Okanagan Agency	1,879	213	3	320	71	54,969 50
Kootenay Agency	234	49		57	3	12,320 00
*Northwest Coast Agency.....						
*Paline and Upper Skeena River Agency.....						
*Cassiar Agency.....						
Total	10,490	661	11	532	98	144,212 00
MANITOBA.						
Glandeboye Agency	86	82	4	97	13	16,350 00
Portage la Prairie Agency	250	40	10	32	33	5,150 00
Manitowapah "	735	67	3	82	75	7,500 00
Norway House "	1,164					1,797 00
The Pas "	349	2	3	2		1,910 00
Birtle "	1,775	143	3	113	75	36,365 00
Total	4,359	334	22	326	195	68,373 00

*No returns.

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AGRICULTURAL AND INDUSTRIAL STATISTICS—Continued.
PERSONALTY OF INDIANS—Continued.

Agency.	LIVE STOCK AND POULTRY.										
	Horses.			Cattle.					Other Stock.		
	Stallions.	Geldings and Mares.	Foals.	Bulls.	Oxen, Work.	Steers.	Cows, Milch.	Young Stock.	Sheep.	Lambs.	Pigs.
NEW BRUNSWICK.											
Richibucto Superintendency..	..	30	..	1	..	27	49	36	..	..	..
Fredericton ..	15	17	..	1	..	9	19	46	..	..	..
Totals ..	15	47	..	2	..	36	89	82	..	..	..
PRINCE EDWARD ISLAND.											
Prince Edward Island Superintendency ..	..	12	..	3	..	..	13	24	1	..	..
NOVA SCOTIA.											
Annapolis County ..	..	..	..	..	2	..	2	..	..	..	..
Shelburne ..	..	..	..	..	..	..	2	..	..	..	..
Digby ..	..	..	..	..	..	..	..	..	..	..	..
*Yarmouth ..	..	..	..	..	..	..	..	..	..	..	..
King's ..	..	2	..	..	..	2	2	2	2	4	8
Queen's ..	..	1	..	..	..	4	4	4	10	..	..
Halifax ..	..	..	..	..	..	..	..	..	..	..	..
Hants ..	1	..	..	..	..	..	..	..	..	..	..
Colchester ..	..	6	..	..	..	..	5	10	..	..	..
Cumberland ..	..	..	..	..	..	..	3	2	..	..	..
Pictou ..	..	1	..	..	..	..	3	1	..	..	..
Antigonish and Guysborough Counties...	..	6	..	..	..	..	..	..	..	..	..
Richmond County ..	..	3	..	2	..	4	6	4	..	..	..
Inverness ..	..	6	..	3	..	..	..	..	..	..	..
Victoria ..	13	..	..	..	..	2	15	20	..	..	..
Cape Breton (Sydney) County ..	6	..	..	2	..	4	14	15	4	2	..
Lunenburg County ..	1	..	..	..	..	..	..	..	..	..	..
Totals ..	3	..	..	1	4	6	12	10	40	30	1

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Cape Breton (Esksami) County.....	6	6	15	30	25	20	50	30	
Total.....	7	54	20	52	100	103	104	70	1
BRITISH COLUMBIA.									
Cowichan Agency.....	171	179	7	48	350	327	1,125	395	.....
West Coast ".....	.....	15	13	.....	84	74	8	.....	.....
Kwakiwalth ".....	.....	.....	1	.....	1	3	.....	.....	.....
Lower Fraser Agency.....	82	548	45	32	637	463	242	370	48
Williams Lake ".....	70	2,157	19	319	423	342	.....	.....	5
Kamloops-Okanagan Agency.....	135	7,781	71	381	1,929	1,865	25	32	37
Kootenay Agency.....	55	1,625	35	58	740	790	.....	.....	.....
*Northwest Coast Agency.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
*Bathine and Upper Skeena River	.....	.....	.....	.....	.....	.....	.....	.....	.....
Cassiar.....	.....	11	.....	.....	.....	.....	.....	.....	.....
Total.....	513	12316	191	898	3,524	3,864	1,400	797	90
MANITOBA.									
Claudebayer Agency.....	66	139	7	201	287	219	.....	.....	.....
Portage la Prairie Agency.....	.....	153	5	16	51	67	.....	.....	1
Manitowapah ".....	.....	388	16	37	653	1,115	57	.....	.....
Norway House ".....	2	29	17	22	148	141	.....	.....	.....
The Pas ".....	11	18	9	12	72	93			
Birtle ".....	4	611	11	17	295	339			
Total.....	83	1,338	65	546	1,506	1,974	57		1

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Cape Breton (Eskaom) County.....	200	2,660 00	5	9	47
Total.....	761	8,305 00	23	61	47
BRITISH COLUMBIA.					
Cowichan Agency.....	5,330	41,695 00	192	1	435
West Coast ".....	615	5,775 00	116	8	1,240
Kwakwaka ".....	540	390 00	22	14	487
Fraser River ".....	3,017	62,869 00	113	158	486
Williams Lake ".....	3,550	93,821 00	22	22	91
Kamloops Okanagan Agency.....	2,964	296,874 00	4	48	145
Kootenay Agency.....	320	390,800 00	4	35	35
Northwest Coast Agency.....					
Habine and Upper Skeena River Agency.....					
Cassiar.....		1,100 00		3	2
Total.....	16,336	638,354 00	447	2,341	2,961
MASTROBA.					
Clandeboye Agency.....	811	39,635 00	11	244	25
Portage la Prairie Agency.....	61	7,300 00		10	3
Manitowapah ".....	130	43,530 00	38	125	152
Norway House ".....		14,230 00	13	355	276
The Pas Agency.....	3	4,943 00		29	276
Birtle.....	580	55,275 00		4	1
Total.....	1,608	161,333 00	122	771	741

* No return received from agents.

† No returns.

6-7 EDWARD VII., A. 1907

AGRICULTURAL AND INDUSTRIAL STATISTICS—Continued.
PERSONALTY OF INDIANS—Continued.

Agency.	GENERAL EFFECTS					HOUSEHOLD EFFECTS.		Value of Real and Personal Property.
	Rifles.	Shot Guns.	Nets.	Steel Traps.	Tents.	Value of	Value of	
						cts.	cts.	cts.
NEW BRUNSWICK.								
Richibucto Superintendency	11	172	266	72	8	5,100 00	16,000 00	103,025 00
Fredericton	72	58	3	499	41	3,810 00	7,540 00	83,354 00
Total	83	230	269	562	49	8,910 00	23,540 00	186,379 00
PRINCE EDWARD ISLAND.								
Prince Edward Island Superintendency		18	35	16		625 00	2,970 00	40,058 00
NOVA SCOTIA.								
Annapolis County	4	9	5	14	2	115 00	150 00	2,507 00
Shelburne	1	6	2	72	2	135 00	215 00	1,630 00
Digby	9	6		20	3	600 00	300 00	4,687 00
Yarmouth								
King's	5	30		100		205 00	500 00	2,288 00
Queen's	8	4	10	14	4	200 00	200 00	3,900 00
Halifax	12	4	18			300 00		3,070 00
Hants	6	16		120		1,500 00	3,000 00	28,430 00
Cabotester	4	12	2	15		65 00	225 00	3,702 00
Cumberland	12	24		35		125 00	450 00	3,285 00
Pictou	4	22	8	13		420 00	750 00	10,851 00
Antigonish and Guysborough Counties		30	2	6		150 00	1,500 00	10,070 00
Richmond County		12		35		350 00	250 00	25,100 00
Inverness	3	20	10	51		310 00	735 00	11,215 00
Victoria		18		160		450 00	500 00	15,840 00
Cape Breton (Sydney) County		4		4		70 00	400 00	6,620 00
Lunenburg County.	4	5		13		200 00	250 00	5,840 00
Cape Breton (Eskasoni) County.	5	8	3	75		835 00	5,000 00	19,075 00
Total	78	231	60	749	15	6,210 00	14,425 00	158,155 00

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BRITISH COLUMBIA.									
Cowichan Agency	347	308	52	17	132	27,060 00	32,240 00	1,010,664 00	
West Coast "	124	404	43	609	329	40,060 00	31,170 00	133,903 00	
Kwakiwath "	157	225	190	2,079	..	14,970 00	48,740 00	117,956 50	
Fraser River "	428	454	177	1,183	408	45,415 00	62,470 00	1,211,805 00	
Williams Lake Agency	414	130	156	1,235	241	12,686 00	14,064 00	496,575 00	
Kamloops-Okanagan Agency	678	272	470	1,321	1,020	21,001 00	46,100 00	2,081,440 50	
Kootenay Agency	177	27	..	131	146	4,747 00	3,845 00	200,506 00	
Northwest Coast Agency	..	..	..	..	..	..	..	..	
Redline and Upper Skeena River Agency	..	..	..	..	..	..	..	..	
Cassiar Agency	..	..	..	..	..	..	..	..	
Total	2,325	1,820	1,088	6,775	2,276	165,930 00	238,629 00	5,402,967 00	
MANITOBA.									
Clandeboye Agency	27	163	381	1,087	239	15,747 00	16,825 00	1,084,316 00	
Portage la Prairie Agency	29	57	32	1,075	92	1,400 00	2,000 00	131,862 00	
Manitowapah "	83	299	654	5,145	274	10,925 00	8,700 00	230,958 00	
Norway House "	41	371	1,672	3,252	361	28,425 00	14,175 00	234,405 00	
The Pas "	46	264	465	3,769	142	12,557 00	5,550 00	106,736 00	
Birtle "	72	102	6	2,490	176	4,064 00	8,530 00	661,351 30	
Total	298	1,256	3,160	16,758	1,284	73,118 00	55,780 00	2,509,678 30	

* No Returns received from agent.

† No Returns.

6-7 EDWARD VII., A. 1907

AGRICULTURAL AND INDUSTRIAL STATISTICS—Continued.

AGRICULTURE, SEASON 1905.

Agency.	GRAIN, ROOTS AND FODDER.									
	Wheat.		Oats.		Barley.		Corn.		Pease.	
	Acres Sown.	Bushels Harvested.	Acres Sown.	Bushels Harvested.	Acres Sown.	Bushels Harvested.	Acres Sown.	Bushels Harvested.	Acres Sown.	Bushels Harvested.
NEW BRUNSWICK.										
Richibucto Superintendency	17	102	176	2,600						
Fredericton "	3½	80	60½	1,510				15	4½	92
Total	20½	182	236½	4,110				15	4½	92
PRINCE EDWARD ISLAND.										
Prince Edward Island Superintendency	8	168	29	267	180			0	1	3
NOVA SCOTIA.										
Annapolis County										
Shedburne "										
Digby "				10						
*Yarmouth "										
King's "			4	100						
Queen's "			1	30						
Halifax "			2½	60						
Hants "			20	15						
Colchester "			3	30						
Cumberland "			1	25						
Pictou "	1½		8	90						
Antigonish and Guysborough Counties			3	60						
Richmond County			8	250						
Inverness "			5	40						
Victoria "			2½	25						

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Cape Breton (Sydney) County.....	15	5	120	25					
Lunenburg County.....		20	200						
Cape Breton (Essexville) County.....		83½	1,055	5	25				
Total.....	2								
BRITISH COLUMBIA.									
Cowichan Agency.....	15	560						15	405
West Coast Agency.....									
Kwakiwilt Agency.....	81	3,220							
Fraser River Agency.....	117	1,700							
Williams Lake Agency.....	2,461	42,530							
Kamloops Okanagan Agency.....	70	1,260							
Kootenay Agency.....									
Northwest Coast Agency.....									
Badine and Upper Skeena River Agency.....									
Cassiar.....									
Total.....	2,714	49,270		14	100	567	1,475	394	1,117½
MANITOBA.									
Candeloys Agency.....									
Portage la Prairie Agency.....	616	11,075		521	1,056				
Manitowapath.....				6	108				
Norway House.....				5	100				
The Pas.....									
Firth.....	3,171½	50,858		191	366	174	268		
Total.....	3,787½	61,933		821	1,630	151	268		

No returns.

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Cape Breton (Sydney) County	1	20	1	25	3	10	6	800	
Lunenburg County							30	1,500	
Cape Breton (Eskaom) County									
Total	1	20	21	65	31	83	1291	7,700	
BRITISH COLUMBIA.									
Cowichan Agency									
West Coast "							391	5,010	13
Kwakwaka							2	242	70
Fraser River "							8	600	
Williams Lake Agency					181	646	268	46,297	2,103
Kamloops-Okanagan Agency					41	112	125	7,140	877
Kootenay Agency					110	1,170	331	38,700	55
* Northwest Coast Agency							70	11,400	
* Babine and Upper Skeena River Agency									
Cassiar Agency									
Total					133	1,928	9031	109,389	831
MANITOBA.									
Candlehoyle Agency									
Portage la Prairie Agency							1371	9,759	
Manitowapah Agency							10	880	
Norway House Agency							29	3,992	
The Pas Agency							96	5,115	1
Birtle Agency							48	3,975	10
Total							451	3,358	
Total							3661	27,079	1

* No return received from agent.

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AGRICULTURAL AND INDUSTRIAL STATISTICS—Continued.
AGRICULTURE, SEASON 1905.

Agency.	GRAIN, ROOTS AND FODDER— <i>Continued.</i>						NEW LAND IMPROVEMENT.					
	Turnips.		Other Roots.		Hay.		Other Fodder.	Land Cleared.	Land Broken.	Land (Proposed for first time).	Land Fenced.	
	Acres Sown.	Bushels Harvested.	Acres Sown.	Bushels Harvested.	Cultivated.	Wild.						
NEW BRUNSWICK.												
Richibucto Superintendency	2½	400	4½	169	116	15	82	25	25	25	25	
Fredericton "					86	10	31					
Total	2½	400	4½	169	202	25	113	25	25	25	25	
PRINCE EDWARD ISLAND.												
Prince Edward Island Superintendency	1½	240			36	20		15	15	15	15	
NOVA SCOTIA.												
Annapolis County					5	4		1	1	1	1	
Shedburne "					2							
Digby "					10							
Yarmouth "												
King's "					2	10		1			40	
Queen's "				10	20	12		1		1	3	
Halifax "	2½		3		15	2						
Hants "					105	25	10					
Colchester "					5							
Cumberland "		50			4							
Pictou "		10			25							
Antigonish and Guysborough Counties	1	50			10	3						
Richmond County	20	20			20	20		5	2	21	9	

6-7 EDWARD VII., A. 1907

AGRICULTURAL AND INDUSTRIAL STATISTICS—Continued.

PROGRESS DURING THE YEAR 1905-6.

AGENCY.	BUILDINGS ERECTED.									
	Dwellings, Stone.	Dwellings, Brick.	Dwellings, Frame.	Dwellings, Log.	Shanties.	Barns.	Horse Stables.	Driving Sheds.	Cattle Stables.	Pig Sties.
NEW BRUNSWICK.										
Richibucto Superintendency			7	3	17	1	1			
Fredericton "			2							
Total			9	3	17	8	1			
PRINCE EDWARD ISLAND.										
Prince Edward Island Superintendency										
NOVA SCOTIA.										
Annapolis County			2		1					1
Shelburne "										
Digby "										
* Yarmouth "										
King's "										
Queen's "										
Halifax "										1
Hants "			1			1				
Colchester "			1							
Cumberland "			1							
Pictou "										
Antigonish and Glaysborough Counties			2							
Richmond County			3		5	1				
Inverness "					1					
Victoria "					1					
Cape Breton (Sydney) County.			7		7					
Lanenburg County			1							1

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Cape Breton (Esquimaux) County										
Total	18	15	2						3	
BRITISH COLUMBIA.										
Agency										
Cowichan	6		2							
West Coast	35									
Kwakwaka	2									
Fraser River	4	1	3						1	
Williams Lake										
Kamloops Okanagan		8								
Kootenay	7									
Northwest Coast										
Palatine and Upper Skeena River Agency		3								
Cassiar										
Total	54	11	5						1	
MANITOBA.										
Agency										
Clandeboye		2							3	
Portage la Prairie		3							3	
Manitowish		23							10	
Norway House		16							3	
The Pas		8								
Birtle	2	8							1	
Total	2	50	4						2	
	2	60	4						3	
									4	
									3	
									4	
									3	
									20	

* No return received from Agent. 1 No returns.

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AGRICULTURAL AND INDUSTRIAL STATISTICS—Continued.
PROGRESS DURING THE YEAR 1905-6.

AGENCY.	BUILDINGS ERECTED.			INCREASE IN VALUE.		
	Root Houses.	Milk Houses.	Corn Cribbs.	Value of New Land Improvements.	Value of Buildings Erected.	Total Value of New Land Improvements and Buildings.
NEW BRUNSWICK.						
Richibucto Superintendency				cts.	cts.	cts.
Fredericton	1	.....	.....	325 00	730 00	1,075 00
Total	1	.....	.....	325 00	1,630 00	1,955 00
PRINCE EDWARD ISLAND.						
Prince Edward Island Superintendency				58 00	.....	58 00
NOVA SCOTIA.						
Annapolis County				40 00	200 00	240 00
Shelburne						
Digby						
Yarmouth						
King's				50 00	.....	50 00
Queen's				40 00	20 00	60 00
Halifax						
Hants						
Colechester				35 00	300 00	300 00
Chambersland					50 00	50 00
Pictou						
Antigonish and Glengarry Counties				30 00	150 00	180 00
Richmond County				300 00	200 00	500 00
Inverness		1		5 00	10 00	15 00
Victoria				50 00	25 00	75 00
Cape Breton (Sydney) County					110 00	110 00

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Lunenburg County.....					300 00
Cape Breton (Esquimaux) County.....					
Total.....	1		700 00	1,265 00	1,965 00
BRITISH COLUMBIA.					
Cowichan Agency.....					
West Coast ".....					
Kwakwakaith ".....					
Fraser River ".....	1		400 00	1,400 00	1,400 00
Williams Lake ".....				5,640 00	5,640 00
Kamloops-Okanagan Agency.....				800 00	800 00
Kootenay ".....				1,445 00	1,445 00
Northwest Coast.....				1,050 00	1,050 00
Habine and Upper Skeena River Agency.....				1,400 00	1,400 00
Cassiar ".....				500 00	500 00
Total.....	1		8,635 00	13,435 00	22,130 00
MANITOBA.					
Chaudeloye Agency.....					
Portage la Prairie Agency.....			492 00	400 00	892 00
Manitowapah ".....			725 00	275 00	1,000 00
Norway House ".....			170 00	1,175 00	1,345 00
The Pas ".....				1,400 00	1,400 00
Birdie ".....	21		70 00	1,215 00	1,285 00
Total.....	21		1,219 00	1,475 00	2,694 00
No returns.			5,676 00	5,940 00	11,616 00

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AGRICULTURAL AND INDUSTRIAL STATISTICS—Continued.

SOURCES AND VALUE OF INCOME.

Agency.	Value of Beef Sold, also of that Used for Food.	Value of Farm Products, including Hay.		Wages Earned.	Received from Land Rentals.	THE ESTIMATED VALUE OF FISH AND MEAT USED FOR FOOD IS INCLUDED IN THESE COLUMNS.				Earned by Other Industries.	Total Income of Indians.		
		%	cts.			%	cts.	%	cts.			%	cts.
NEW BRUNSWICK.													
Richibucto Superintendency.		%	cts.	%	cts.	%	cts.	%	cts.	%	cts.	%	cts.
Fredericton "	7,500 00		4,300 00		24,800 00		10,375 00		300 00		10,075 00		49,825 00
			3,945 50		31,450 00		450 00		7,000 00		12,800 00		63,165 50
Total	7,500 00		8,245 50		56,250 00		10,825 00		7,300 00		22,850 00		112,990 50
PRINCE EDWARD ISLAND.													
Prince Edward Island Superintendency	60 00		1,080 00		160 00		1,245 00		50 00		17,400 00		19,995 00
NOVA SCOTIA.													
Annapolis County			200 00		700 00		120 00		100 00		400 00		1,520 00
Shelburne "			75 00		1,000 00		200 00		600 00		200 00		2,285 00
Digby "			143 00		1,000 00		75 00		500 00		600 00		2,318 00
*Yarmouth "													
King's "			610 00		5,000 00		100 00		250 00		500 00		6,460 00
Queen's "			740 00		2,500 00		500 00		600 00		500 00		4,840 00
Halifax "			500 00										
Hants "	500 00		2,000 00		900 00		900 00		1,000 00		2,000 00		6,500 00
Colchester "			125 00		3,000 00		40 00		450 00		1,450 00		5,095 00
Cumberland "			600 00		3,000 00		20 00		800 00		1,500 00		5,920 00
Pictou "			380 00		1,100 00		750 00		50 00		700 00		2,980 00
Antigonish and Guysborough Counties.			450 00		1,500 00		500 00		60 00		6,500 00		8,956 00
Richmond County			925 00		2,500 00		500 00		60 00		700 00		4,735 00
Inverness "	50 00		2,130 00		3,000 00		300 00		50 00		1,300 00		6,943 00
Victoria "			2,400 00		1,000 00		600 00		500 00		5,000 00		9,700 00
*Cape Breton (Sydney) County.	200 00												
Lunenburg County			1,240 00		3,000 00		100 00		75 00		100 00		4,515 00

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Cape Breton (Essex) County	1,500 00	5,000 00	500 00	1,000 00	2,000 00	10,000 00
Total	780 00	34,300 00	209 00	6,035 00	23,450 00	83,257 00
BRITISH COLUMBIA						
Cowichan Agency	25,400 00	28,850 00	34,450 00	2,480 00	400 00	91,580 00
West Coast "	380 00	9,200 00	32,700 00	4,980 00	59,000 00	100,360 00
Kwawkwath "	460 00	24,650 00	37,055 00	6,795 00	12,025 00	80,965 00
Fraser River "	47,938 00	85,715 00	92,983 00	58,020 00	53,454 00	347,615 90
Williams Lake Agency	28,065 25	30,250 00	15,575 00	22,473 00	9,150 00	100,813 25
Kamloops Okanagan Agency	142,031 00	176,600 00	36,150 00	26,200 00	35,600 00	416,581 00
Kootenay Agency	30,703 00	9,700 00	1,585 00	7,850 00	1,350 00	56,488 00
* Northwest Coast Agency						
* Babine and Upper Skeena River Agency						
* Cassiar						
Total	15,963 00	364,965 00	542 90	128,398 00	174,079 00	1,209,423 15
MANITOBA						
Claudebøye Agency	1,810 00	21,300 00	18,100 00	7,200 00	16,400 00	86,967 00
Portage la Prairie "	750 00	5,800 00	545 00	5,500 00	3,200 00	24,405 00
Manitowayah "	2,200 00	10,650 00	14,020 00	17,350 00	4,560 00	57,035 00
Norway House "		6,850 00	10,000 00	22,660 00	1,825 00	69,995 00
The Pas "		8,070 00	3,410 00	29,050 00	1,050 00	46,491 00
Bartle "	3,010 00	8,380 00	1,255 00	9,625 00	4,031 00	74,276 71
Total	7,770 00	61,050 00	47,930 00	91,675 00	31,726 00	359,190 71

* No report from agent

6-7 EDWARD VII., A. 1907

AGRICULTURAL AND INDUSTRIAL STATISTICS—Continued.
REALTY OF INDIANS.

Agency.	LANDS AND SOURCES FROM WHICH INDIANS DERIVE THEIR SUPPORT.										PUBLIC BUILDINGS, PROPERTY OF THE BAND.									
	Cleared but not under Cultivation.	Acres.	Under actual Cul- tivation.	Number engaged in farming.	Number engaged in Hunting and Fishing.	Number engaged in other in- dustries.	Number engaged in Stock Raising.	Saw Mills.	Grist Mills.	Threshers.	Engines.	Other Machinery.	Churches.	Council Houses.	School Houses.	Drinking Sheds.	Other Buildings.	Fences.	Value Public of Properties, &c.	
SASKATCHEWAN.																				
Pelly Agency, Treaty No. 4	65,841	880		43	57		102			2	1	1	21		1	2	12		9,950 00	
Assiniboine Agency, Treaty No. 4	17,034	700		23	12	7	14			1	1	64			1				2,032 00	
Moose Mountain Agency, Treaty No. 4	10,113	575		24		12	29			1	1	1							1,835 00	
Qu'Appelle	160,701	6,060		111		749	131			2	1		1				2		5,143 00	
Crooked Lakes	161,220	1,236		39			66			1									1,000 00	
Touchwood Hills	68,161	669		57	103	188	85		1	1	1	2	1		2				6,300 00	
Battleford	160,760	1,326		118	19	196	205		1	1	1	1			3		1		1,600 00	
Carlton	134,201	1,054		474	507	611	541	1	1	2	1	1	12 1/2		3			1	9,315 00	
Duck Lake	88,979	1,644		61	137	16	130			2	1				3				6,650 00	
Onion Lake	143,030	178		43	148	25	122		1										3,200 00	
Total	1,010,043	14,353		993	983	1,804	1,128	1	3	11	8	27	2		18	2	18	2	46,427 00	
ALBERTA.																				
Edmonton Agency, Treaty No. 6	38,014	1,330		20	73	40	76	2							3				9,725 00	
Hobbema	69,961	319		147	137	57	118	1	1	2	1	1			3				10,500 00	
Saddle Lake	72,123	1,136		107	132		107								4				2,625 00	
Stony	45,536	190		50	100	100	60						1		2	1			1,100 00	
Sarcee	58,120	218		19	7	5	21						1	1	1				11,000 00	
Blackfoot	299,950	250		24			146													
Blood	349,255	71					286								3				22,900 00	
Poignan	115,046	250		11		50	145	1				1	1		1	1	2		11,200 00	
Total	1,018,000	3,764		381	449	232	939	1	2	21	21	21	3	1	15	21	1		71,450 00	

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AGRICULTURAL AND INDUSTRIAL STATISTICS—Continued.

REATY OF INDIANS—Continued.

Agency.	PRIVATE FENCING AND BUILDINGS.													Total Value of Private Fencing and Buildings.
	Across Fences.	Dwellings.	Frame Dwellings.	Shanties.	Barries.	Horse Stables.	Drivings.	Cattle Stables.	Pig Sties.	Store Houses.	Milk Houses.	(Van) Chins.	Value of Private Buildings.	
SASKATCHEWAN.														
Pelly	887	67	55	46	103	21	7	6	2,870 00	13,155 00	16,025 00		%	ct.
Assiniboine	6,507	37	45	6	24				600 00	2,275 00	2,275 00			
Moose Mountain	1,480	3	45	12	20	2				2,500 00	2,500 00			
Qu'Appelle	27,470 1	184		101	140	2	1	63	27,470 50	19,335 00	17,025 50			
Crooked Lakes	2,176	81	24	53	83	14	3	11	4,352 00	7,820 00	12,172 00			
Touchwood Hills	13,377	86	1	51	1	9	2		2,510 00	8,950 00	11,460 00			
Battleford	27,981	135		44	161	17	38		14,014 00	12,800 00	26,874 00			
Carlton	2,109	81	157	60	112	5	40	6	1,944 00	14,130 00	16,074 00			
Duck Lake	4,010	125	4	23	150	5	36		21,550 00	19,035 00	40,615 00			
Onion Lake	335	101			61				730 00	6,530 00	7,280 00			
Total.....	88,422 1	960	289	3	306	1	915	17	130	47	23	80	106,830 00	182,891 10
ALBERTA.														
Edmonton	2,256	31	70	26	11	63	6	28	1,265 00	9,035 00	10,300 00			
Holburna	890	106	8	53	10	15	32	1	682 00	17,240 00	17,932 00			
Saddle Lake	1,990	170			105	18			5,870 00	11,165 00	17,035 00			
Stony	11,000	130		44	25	25		20	7,000 00	14,000 00	21,000 00			
Sturgeon	69,120	1	50	26	1	17		21	7,000 00	1,000 00	11,000 00			
Blackfoot	12,820	10	120	63	3	80		7	1,000 00	13,000 00	14,000 00			
Blood	1,900	3	210	70	100		18		2,710 00	25,130 00	27,840 00			
Pelican	3,530	21	92	36	25		20	1	8,500 00	24,035 00	32,535 00			
Total.....	103,506	37	909	78	320	15	496	6	63	124	9	8	117,605 00	151,632 00

6-7 EDWARD VII., A. 1907

AGRICULTURAL AND INDUSTRIAL STATISTICS—Continued.
PERSONALTY OF INDIANS—Continued.

AGRICULTURAL IMPLEMENTS, VEHICLES, &c.											
Agency.	Ploughs.	Harrows.	Seed Drills.	Culti- vators.	Land Rollers.	Mowers.	Reapers and Binders.	Horse Rakes.	Fanning Mills.	Threshing Machines.	Tool Chests.
SASKATCHEWAN.											
Pelly	54	36	2	1	..	36	..	26	1	..	5
Assiniboine	29	10	3	..	..	16	..	7	1	1	..
Moose Mountain	22	5	3	..	..	15	3	9	1	1	..
Qu'Appelle	119	68	24	2	..	70	25	69	6	17	4
Crooked Lakes	88	45	15	6	..	42	13	43	6	..	..
Tonguewood Hills	47	22	7	8	..	43	8	34	1	1	3
Battleford	117	53	..	..	..	81	11	65	6	..	..
Carlton	77	48	3	..	..	41	11	36	4	..	4
Duck Lake	90	62	13	..	..	47	14	49	2	..	14
Onion Lake	26	16	..	..	..	41	..	35	..	..	1
Total	669	365	70	17	..	432	87	384	28	20	31
ALBERTA.											
Edmonton	41	26	7	..	..	27	9	21	2	..	2
Hobbema	98	44	3	2	2	35	4	26	..	..	3
Saddle Lake	31	27	..	..	..	30	4	28	..	..	..
Stony	22	6	..	..	..	26	..	25	..	..	..
Sarcee	8	3	1	1	1	14	2	10	1	..	1
Blackfoot	55	19	1	3	2	73	1	64	..	1	1
Blood	15	2	..	..	..	84	..	85	..	..	..
Poignan	20	8	1	..	..	42	1	45	1	..	..
Total	200	135	13	6	5	331	21	304	4	1	14

SESSIONAL PAPER No. 27

AGRICULTURAL AND INDUSTRIAL STATISTICS—Continued.
PERSONALTY OF INDIANS Continued.

PAPER No. 27

AGRICULTURAL IMPLEMENTS, VEHICLES, &c.

Agency.		Value of Implements and Vehicles.						
Agency, Treaty No.	Other Implements.	Wagons.	Carts.	Sleighs, Draught.	Sleighs, Driving.	Democrat Wagons.	Buggies and Road Carts.	Total.
SASKATCHEWAN.								
Pelly	602	64	37	54	27	8	33	8,650 00
Assiniboine	63	29	1	22	..	1	8	1,736 00
Moose Mountain	120	32	2	23	10	16	14	3,911 00
Qu'Appelle	1,287	149	47	122	44	24	57	25,101 00
Crooked Lakes	420	81	7	67	55	11	38	12,823 00
Touchwood Hills	347	71	17	59	25	3	19	9,387 00
Battleford	1,306	147	42	119	132	19	45	23,485 00
Carlton	1,314	78	15	81	61	11	23	12,496 00
Duck Lake	1,794	76	55	71	62	11	44	25,741 00
Onion Lake	520	69	14	63	..	..	28	7,565 00
Total	7,773	796	243	683	416	104	309	131,455 00
ALBERTA.								
Edmonton Agency, Treaty No. 6	383	44	..	45	15	3	7	7,760 25
Hobbieha	440	93	38	80	54	1	13	9,800 00
Saddle Lake	794	59	7	74	..	5	7	18,035 00
Stony	45	64	..	51	..	2	6	7,700 00
Sarcee	270	26	1	17	9	4	4	4,000 00
Blackfoot	240	148	..	26	35	17	45	19,280 00
Blood	2,000	280	525	..	..	45	50	46,015 00
Peigan	315	100	..	..	..	20	20	6,685 00
Total	4,437	823	574	293	126	97	152	119,275 25

6-7 EDWARD VII., A. 1907

AGRICULTURAL AND INDUSTRIAL STATISTICS—Continued.
PERSONALTY OF INDIANS—Continued.

LIVE STOCK AND POULTRY.

Agency.	Horses.		Cattle.					Other Stock.			
	Stallions.	Goldings and Mares.	Foals.	Bulls.	Oxen, Work.	Steers.	Cows, Milch.	Young Stock.	Sheep.	Lambs.	Boats.
SASKATCHEWAN.											
Pelly Agency, Treaty No. 4		176		19	51	292	328	282	37		
Assiniboine " " 4		93		7	28	25	60	57			
Moose Mountain " " 4		98		4	29	65	105	84			
Qu'Appelle " " 4	20	148		13	34	143	477	652			
Crooked Lakes " " 4	3	271		7	53	33	247	382			
Touchwood Hills " " 4	11	262		8	38	94	391	423			
Battleford " " 6		348		24	129	131	425	1,038	103		
Carlton " " 6	1	313		19	120	186	480	536			
Duck Lake " " 6	2	334		3	34	111	338	845	15	13	
Onion Lake " " 6	15	278		7	69	182	492	619			
Total	52	2,524		106	585	1,262	3,543	4,938	155	13	
ALBERTA.											
Edmonton Agency, Treaty No. 6	1	433			5	30	219	385	2	3	
Hobbema " " 6		440			12	65	327	561			
Saddle Lake " " 6	1	232		11	53	95	237	426	45	30	
Stony " " 7		1,020				66	362	539			
Sarcee " " 7		350					120	220			
Blackfoot " " 7	44	2,500		51		179	1,425	1,558			
Blood " " 7	11	3,034		155		502	3,136	3,676			
Peigan " " 7		750				225	1,176	1,399			
Total	57	8,759		247	70	1,162	7,002	8,767	47	33	

SESSIONAL PAPER No. 27

AGRICULTURAL AND INDUSTRIAL STATISTICS—Continued.
PERSONALTY OF INDIANS Continued.

Agency.	LIVE STOCK AND POULTRY.						GENERAL EFFECTS.				
	Other stock Com.		Poultry.				Value of Live Stock and Poultry.	Sail Boats.	Row Boats.	Canoes.	
	Horses.	(Other Pigs.	Turkeys.	Geese.	Ducks.	Cocks and Hens.					
SASKATCHEWAN.											
Pelly Agency, Treaty No. 4.....	10	125	110	1	20	1,314	445,392 00	47	312		
Assiniboine Agency, Treaty No. 4.....	7	53	46	3	2	285	28,240 00	2	22		
Moose Mountain Agency, Treaty No. 4.....	6	10				80	40,771 00	21	69		
Qu'Appelle.....	4					140	29,023 00				
Crooked Lakes.....	4						36,225 00				
Touchwood Hills.....	4					150	17,475 00				
Bathford.....	6					40	95,180 00	11			
Carlton.....	6						228,029 00				
Duck Lake.....	6					50	65,333 00	2			
Onion Lake.....	6						540,276 00	15	91		
Total.....	7	63	46	3	2	745					
ALBERTA.											
Edmonton Agency, Treaty No. 6.....	7	53	46	3	2	285	28,240 00	2	22		
Hobbema.....	6					80	40,771 00	21	69		
Saddle Lake.....	6					140	29,023 00				
Stony.....	7						36,225 00				
Spruce.....	7					150	17,475 00				
Blackfoot.....	7					40	95,180 00	11			
Blood.....	7						228,029 00				
Peigan.....	7					50	65,333 00	2			
Total.....	7	63	46	3	2	745					

6-7 EDWARD VII., A. 1907

AGRICULTURAL AND INDUSTRIAL STATISTICS—Continued.
PERSONALTY OF INDIANS—Continued.

Agency.	GENERAL EFFECTS.					HOUSEHOLD EFFECTS.		Value of Real and Personal Property.
	Rifles.	Shot Guns.	Nets.	Steel Traps.	Tents.	Value of.	Value of.	
					§ cts.	§ cts.	§ cts.	§ cts.
SASKATCHEWAN.								
Pelly Agency, Treaty No. 4	29	95	4	830	96	2,265 00	5,580 00	87,264 00
Assiniboine Agency, Treaty No. 4	13	37		156	36	274 00	645 00	218,728 00
Moose Mountain Agency, Treaty No. 4	6	30	1	70	55	687 00	600 00	221,643 00
Qu Appelle	41	109	28	256	225	2,615 00	9,080 00	1,699,269 50
Crooked Lakes	14	44	12	97	98	1,569 00	5,480 00	938,320 00
Tongue River	19	66		1,148	87	1,969 00	3,380 00	610,131 45
Touchwood Hills	81	150	65	685	200	5,631 00	10,150 00	903,905 00
Battleford	138	221	259	3,083	216	8,145 50	4,596 00	617,258 50
Carlton	32	185	69	3,617	179	8,842 00	13,300 00	483,194 00
Duck Lake	48	89	102	1,460	192	5,420 00	5,475 00	727,763 00
Omaha Lake								
Total	441	1,026	540	11,402	1,384	37,418 50	56,286 00	7,291,957 95
ALBERTA.								
Edmonton Agency, Treaty No. 6	56	92	68	2,033	134	3,350 00	2,500 00	427,185 25
Hobbema	20	95	110	300	127	1,465 00	1,825 00	788,809 00
Saddle Lake	28	116	116	905	104	3,891 00	2,775 00	271,137 00
Stony	125	25	3	220	138	3,000 00	9,000 00	245,655 00
Sarcee	6	8		40	75	500 00	2,000 00	987,917 00
Blackfoot	47	41		24	125	4,065 00	12,000 00	1,974,765 00
Blood	40	10		40	183	2,270 00	6,000 00	1,404,385 00
Poison	20	35			98	1,319 00	4,000 00	709,392 00
Total	342	422	297	3,562	984	19,810 00	40,100 00	6,809,765 25

SESSIONAL PAPER No. 27

AGRICULTURAL AND INDUSTRIAL STATISTICS—Continued.
PROGRESS DURING THE FISCAL YEAR 1905-6.

Agency.		GRAIN, ROOTS AND FODDER.									
		Wheat.		Oats.		Barley.		Potatoes.		Carrots.	
		Acres Sown.	Bushels Harvested.	Acres Sown.	Bushels Harvested.	Acres Sown.	Bushels Harvested.	Acres Sown.	Bushels Harvested.	Acres Sown.	Bushels Harvested.
SASKATCHEWAN.											
Pelly Agency, Treaty No. 4.		1,337	4,289	490	14,285	5	100	14	2,125	14	115
Assiniboine Agency, Treaty No. 4.		300	5,000	50	2,500			7	1,300	1	75
Moose Mountain Agency, Treaty No. 4.		294½	3,635	97	1,643						
Qu'Appelle		1,970	43,300	957	27,278	4	100	26½	2,673		55
Crooked Lakes		620	12,665	252	7,753			15½	1,270		
Touchwood Hills			13	332	11,997	4½	130	9	1,684	1½	70
Battleford		424½	6,518	485½	14,752						
Carlton		241	3,392	311	5,733	79½	973	16½	1,210	2½	165
Duck Lake		407½	3,895	153½	4,308	16	169	15½	941	1	85
Omion Lake		6	85	92	1,733	18	173	6	690		59
Total.		4,338	82,792	3,580½	91,992	127	1,645	110½	11,906	7½	622
ALBERTA.											
Edmonton Agency, Treaty No. 6		70	1,459	339	6,910	42	845	21½	1,546	1	50
Hobbema		177	2,755	97	3,349			9	1,270	6	900
Stettin Lake		67½	772	349	7,866	45½	380	21½	1,527		
Stony				115	Fodder.			3½	150		
Sarcee		1½	30	172½	1,163			10½	377		
Blackfoot				70	Fodder.			30		10	
Blood											
Peigan		30		40	1,300			12	480		
Total		346	5,016	1,212½	23,528	87½	1,225	108½	5,350	17	950

6-7 EDWARD VII., A. 1907

AGRICULTURAL AND INDUSTRIAL STATISTICS—Continued.
AGRICULTURE, SEASON 1905—Continued.

Agency.	GRAIN, ROOTS AND FODDER—Continued.										NEW LAND IMPROVEMENTS.			
	Turnips.				Other Roots.		Hay.		Other Fodder.	Land Cleared.	Land Broken.	Land Cropped for first time.	Land Fenced.	
	Acres Sown.		Bushels Harvested.		Acres Sown.	Bushels Harvested.	Cultivated.	Wild.						
	Tons.	Tons.												
SASKATCHEWAN.														
Pelly	1½	240	1	75			Tons.	3,620	1,512	Acres.	126	227	1,599	
Assiniboine	2	300						754	134		63½	90		
Moose Mountain								500	360		748	583	182	
Qu'Appelle	9½	913	3½	262				2,725	5,715		144	220	974	
Crooked Lakes	3½	152	2½	290				1,865	1,065			288	13,009	
Touchwood Hills	4½	740	6½	332				1,715	740		102	102	227	
Battleford	6		43½				55	4,940	906		21	139	470	
Carlton	8	313	2½	129				2,086	357		213	115	130	
Duck Lake	5½	211						2,126	490		54	12	170	
Union Lake	6		4	157				2,302	125					
Total	29½	2,869	63	1,245			55	22,633	11,464	21	1,514½	1,796	16,761	
ALBERTA.														
Edmonton	3	50	3	60				1,748	455		22		30	
Hobbema	4	800						4,250	580		50	75	90	
Saddle Lake	27	913	7	118				2,654	350		146	301	840	
Stony	1½	100						1,050	400					
Sarcose	12½	154					35	914	33		25	24	25	
Blackfoot	10		3					1,400					2,000	
Blood								2,910						
Peigan								1,200	20		80	50	700	
Total	45½	1,863	26	332			35	16,156	1,788		317	450	3,685	

SESSIONAL PAPER No. 27

AGRICULTURAL AND INDUSTRIAL STATISTICS--Continued.

PROGRESS DURING THE YEAR 1905-6.

Agency.		BUILDINGS ERECTED.										
		Dwellings, Stone.	Dwellings, Brick.	Dwellings, Prairie.	Dwellings, Log.	Shanties.	Barns.	Horse Stables.	Driving Stables.	Cattle Stables.	Pig Sties.	Store House.
SASKATCHEWAN.												
Pelly	Agency, Treaty No. 4.	.....	.....	.....	13	.....	.....	4	.....	8	.....	.....
Assiniboine	"	.....	.....	.....	34	.....	.....	6	.....	25	.....	.....
Moose Mountain	"	.....	.....	.....	4	1	.....	.....	.....	.....	.....	.....
Qu'Appelle	"	.....	.....	.....	18	.....	.....	7	.....	4	.....	.....
Crooked Lakes	"	.....	.....	1	.....	1	.....	.....	.....	1	.....	1
Touchwood Hills	"	.....	.....	.....	2	.....	.....	2	.....	8	.....	4
Rattleford	"	.....	.....	.....	9	.....	.....	5	.....	6	.....	.....
Carlton	"	.....	.....	.....	17	.....	.....	5	.....	2	.....	.....
Duck Lake	"	.....	.....	.....	10	13	.....	3	.....	21	1	7
Onion Lake	"	.....	.....	.....	6	.....	.....	.....	.....	4	.....	.....
Total	.....	.....	.....	1	133	15	.....	42	.....	79	3	14
ALBERTA.												
Edmonton	Agency, Treaty No. 6.	.....	.....	2	.....	2	.....	6	.....	.....	.....	2
Hobbema	"	.....	.....	.....	8	.....	.....	.....	.....	.....	.....	.....
Saddle Lake	"	.....	.....	.....	2	.....	.....	.....	.....	3	.....	.....
Stony	"	.....	.....	.....	9	.....	.....	8	.....	5	.....	.....
Sargoe	"	.....	.....	.....	1	.....	.....	4	.....	6	.....	.....
Blackfoot	"	.....	.....	2	1	.....	.....	12	.....	15	.....	.....
Blood	"	.....	.....	.....	10	.....	.....	.....	.....	.....	.....	.....
Peigan	"	.....	.....	.....	7	.....	.....	.....	.....	.....	.....	.....
Total	.....	.....	.....	4	43	2	.....	32	.....	39	.....	2

SESSIONAL PAPER No. 27

AGRICULTURAL AND INDUSTRIAL STATISTICS—Continued.

SOURCES AND VALUE OF INCOME.

Agency.	Value of Beef Sold, also of that Used for Food.		Value of Farm Products, including Hay.		Wages Earned.		Received from Land Rentals.		THE ESTIMATED VALUE OF FISH AND MEAT USED FOR FOOD IS INCLUDED IN THESE COLUMNS.				Earned by other Industries.		Total Income of Indians.	
	%		%		%		%		Earned by Fishing.		Earned by Hunting and Trapping.		%		%	
	cts.	\$	cts.	\$	cts.	\$	cts.	\$	cts.	\$	cts.	\$	cts.	\$	cts.	\$
SASKATCHEWAN.																
Pelly	Agency, Treaty No. 4.	5,613 00	17,163 80	4,500 00	10,280 00	485 00	11,500 00	5,275 00	54,816 80							
Assiniboine	"	400 75	8,500 00	2,750 00		2,400 00	575 00	3,458 00	18,083 75							
Moose Mountain	"	1,885 50	4,369 00	200 00		350 00	75 00	1,600 00	8,479 50							
Qu'Appelle	"	5,070 00	57,144 30	14,190 00		2,250 00	3,400 00	12,505 00	94,559 30							
Gravelled Lakes.	"	2,320 00	14,007 00	542 55		440 00	2,926 00	8,135 13	28,180 68							
Touchwood Hills	"	4,354 65	12,792 10	4,500 95		300 00	14,708 60	2,816 25	39,982 55							
Battleford	"	8,819 60	22,097 00	8,175 00		1,384 00	5,975 00	8,260 00	49,710 00							
Carlton	"	4,805 44	8,200 05	10,062 15		18,603 05	53,347 47	4,089 97	99,104 13							
Duck Lake	"	12,672 54	16,858 73	16,168 35		9,200 00	65,221 61	15,082 97	133,154 43							
Onion Lake	"	3,797 00	10,660 00	740 00		2,720 00	18,567 00	6,232 00	42,716 00							
Total.		50,347 88	171,704 98	56,629 20	10,280 00	38,132 65	176,295 71	67,400 32	570,787 14							
ALBERTA.																
Edmonton	Agency, Treaty No. 6.	1,725 00	11,975 00	8,485 00		400 00	26,200 00	1,600 00	50,385 00							
Hobbema	"	4,316 00	17,431 00	1,005 00		2,380 00	2,800 00	770 00	29,505 00							
Saddle Lake	"	395 35	11,892 65	2,776 45		3,950 00	10,008 30	675 54	32,698 49							
Stony	"	2,627 12	2,500 00	2,138 75		4,250 00	4,250 00	10,333 87	21,848 87							
Sarcee	"	888 21	4,500 00	2,000 00		100 00	100 00	500 00	8,038 24							
Blackfoot	"	8,922 45	3,900 00	7,000 00				10,000 00	20,822 45							
Blood	"	11,233 63	8,814 23	12,887 04				8,122 77	41,057 67							
Peguin	"	8,708 94	2,882 00	2,000 00				4,250 00	17,880 94							
Total.		38,826 93	66,807 88	38,892 24		7,030 00	43,358 30	36,231 31	231,236 66							

INDIAN WOMEN WHO HAVE COMMUTED THEIR ANNUITY BY A TEN
YEARS' PURCHASE (\$50) UNDER SECTION 11 OF THE
INDIAN ACT.

Commutations 1905-6.

Clandeboye Agency.

Mrs. Wm. Watt Parisien, No. 908—St. Peter's Band.

Mrs. Sophie Polsen, No. 41½—St. Peter's Band.

Norway House Agency.

Mrs. Maria Beecham, No. 16—Norway House Band.

Mrs. Edith Morrison, No. 191—Norway House Band.

Mary Jane McKay, No. 65—Norway House Band.

Rat Portage Agency.

Mary Hooper, No. 77—Assabaska Band.

Mary Ann Valiquette, No. 48 Eagle Lake Band.

Cr hooked Lakes Agency.

Genièvre Favel, No. 177—Cowessess Band.

Julie Flamand, No. 120—Cowessess Band.

Duck Lake Agency.

Mrs. A. Turner, No. 66—James Smith's Band.

Edmonton Agency.

Julia McCorrister, No. 41—Paul's Band.

Sophie Gibbons, No. 147—Enoch's Band.

Saddle Lake Agency.

E. H. Whitford, No. 170—James Seenum's Band.

SESSIONAL PAPER No. 27

RETURN A (1) Of Officers and Employees of the Department of Indian Affairs on
July 1, 1906.

HEADQUARTERS—INSIDE SERVICE.

Name.	Rank.	Annual Salary.	Date of Present Rank.	Date of First Appointment to Civil Service.
Hon. Frank Oliver . . .	Superintendent General.....		Nov. 21, 1902	Sept. 1, 1897
Frank Pedley.....	Deputy Superintendent General.....	4,000	July 1, 1897	Oct. 1, 1876
John D. McLean.....	Chief Clerk and Secretary.....	2,700	Dec. 30, 1898	July 1, 1879
Samuel Stewart.....	" Assistant Secretary.....	2,150	July 6, 1898	Oct. 8, 1880
Duncan C. Scott.....	Chief Clerk and Accountant.....	2,500	" 1, 1904	June 5, 1885
Fred'k H. Paget.....	" Chief Surveyor.....	2,000	" 1, 1905	14, 1884
Samuel Bray, D.L.S.....	Private Secretary to Supt. General.....	1,950	" 1, 1902	Dec. 2, 1901
James B. Harkin.....	Chief Clerk, in charge of Land and Timber Branch.....	1,900	Feb. 6, 1906	Nov. 24, 1883
William A. Orr.....	First Class Clerk.....	1,900	Oct. 14, 1891	Aug. 1, 1877
John McGirr.....	"	1,600	Aug. 2, 1902	Feb. 1, 1884
Alfred E. Kemp.....	"	1,550	July 1, 1905	July 9, 1880
Hiram McKay.....	"	1,500	May 10, 1906	Dec. 30, 1886
James J. Campbell.....	"	1,500	July 1, 1886	Jan. 10, 1883
Henry C. Ross.....	Second Class Clerk.....	1,500	Dec. 1, 1884	April 1, 1876
Martin Benson.....	"	1,400	Jan. 11, 1899	Dec. 29, 1896
John D. Sutherland.....	"	1,400	July 1, 1899	Mar. 24, 1884
John W. Shore.....	"	1,350	Jan. 30, 1903	June 21, 1888
Geo. M. Matheson.....	"	1,350	" 30, 1903	Feb. 7, 1891
Robert B. E. Moffat.....	"	1,250	Feb. 1, 1905	June 23, 1880
Joseph Delisle.....	"	1,250	July 1, 1905	Feb. 15, 1898
Peter Joseph O'Connor.....	"	1,200	Aug. 25, 1905	Aug. 25, 1905
Robert M. Ogilvie.....	Architect.....	1,200	May 10, 1906	July 21, 1891
James Guthrie.....	Junior Second Class Clerk.....	1,100	July 1, 1900	April 3, 1882
Fannie Yeilding.....	"	1,100	" 1, 1900	Nov. 24, 1883
Caroline Reiffenstein.....	"	1,100	" 1, 1900	May 31, 1890
Edith H. Lyon.....	"	1,100	" 1, 1900	June 30, 1890
Helen G. Ogilvy.....	"	1,100	" 1, 1900	May 31, 1890
Mary D. Maxwell.....	"	1,100	" 1, 1900	Jan. 31, 1891
Floretta K. Maracle.....	"	1,100	" 1, 1900	Mar. 26, 1891
Frederick R. Byshe.....	"	1,100	" 1, 1900	July 21, 1891
Louisa E. Dale.....	"	1,050	" 1, 1900	Oct. 14, 1891
Thos. P. Moffat.....	"	950	" 1, 1900	Sept. 11, 1894
Emma S. Martin.....	"	950	" 1, 1901	April 1, 1893
Chas. A. Cooke.....	"	950	" 1, 1901	Oct. 12, 1896
Sarah M. O'Grady.....	"	950	Jan. 21, 1902	Jan. 21, 1902
Herbert N. Awrey.....	"	950	Nov. 13, 1902	Nov. 13, 1902
Alex. F. MacKenzie.....	"	950	Jan. 30, 1903	Jan. 30, 1903
Geo. A. Conley.....	"	950	April 1, 1903	April 1, 1903
Selwyn E. Sangster.....	"	900	July 15, 1901	July 15, 1901
Wm. Edwin Allan.....	"	900	" 1, 1904	Jan. 2, 1901
Helen M. O'Donahoe.....	"	900	" 1, 1904	July 1, 1901
David Morin.....	"	850	June 23, 1905	" 28, 1899
John Ackland.....	"	850	July 1, 1905	Nov. 18, 1896
Margaret H. Brennan.....	"	800	April 20, 1906	April 20, 1906
Robert Pringle.....	"	800	May 10, 1906	May 26, 1899
Gertrude A. Gorrell.....	Writer.....	655	Jan. 22, 1900	Jan. 22, 1900
Audrey J. Jones.....	"	650	May 14, 1900	May 14, 1900
Sarah E. Whitehead.....	"	650	July 1, 1901	July 1, 1901
Effie K. McLatchie.....	"	550	Oct. 14, 1904	Oct. 14, 1904
Lottie Craig.....	"	550	July 31, 1905	July 31, 1905
Maud M. McIntosh.....	"	500	Feb. 1, 1906	Feb. 1, 1906
Ellen J. Findlay.....	"	500	Mar. 26, 1906	Mar. 26, 1906
Hugh M. Graham.....	"	500	" 26, 1906	" 26, 1906
Gertrude C. Neelin.....	"	700	July 26, 1892	Oct. 18, 1887
Benjamin Hayter.....	Packer.....	700	Mar. 18, 1893	Mar. 18, 1893
William Seale.....	Messenger.....	550	Aug. 20, 1904	Aug. 20, 1904
Fred. Munroe.....	"	500	Oct. 10, 1905	Oct. 19, 1905
McLeod S. McAllister.....	"			

6-7 EDWARD VII., A. 1907

RETURN A (1) Of Officers and Employees of the Department of Indian Affairs on
July 1, 1906.

OFFICERS OF OUTSIDE SERVICE AT HEADQUARTERS.

Name.	Rank.	Annual Salary.	Date of Present Rank.	Date of First Appoint- ment to Civil Service.
		\$		
Jas. Ansdell Macrae.	Insp. of Indian Agencies and Reserves..	1,800	Oct. 1, 1892	June 14, 1881
Geo. L. Chitty.....	Inspector of Timber.....	1,500	June 21, 1893	" 21, 1893
P. H. Bryce, M.D.....	Medical Inspector.....	1,000	Feb. 1, 1904	Feb. 1, 1904
Sydney Swinford.....	Attached to Accountant's Branch.....	1,600	Mar. 1, 1905	May — 1886
Henry Fabien.....	Draughtsman	1,000	Sept. 1, 1905	Sept. 1, 1905

SESSIONAL PAPER, No. 27

RETURN A (2)—Of Officers and Employees of the Department of Indian Affairs on July 1, 1906.

OUTSIDE SERVICE.

ONTARIO.

Name.	Office.	Annual Salary, &c.	Address.	Bands or Reserves in Agency.
Adams, Joshua.....	Indian Land Agent.	\$ cts. Commission of 5 per cent on collections.....	Sarnia.....	Chippewas of Sarnia.
Aylsworth, W. R.....	Indian Agent.....	700 00	Belleville.....	Molawks of Bay of Quinte, Tyendinaga.
Cameron, Edwin D.....	Indian Supt.....	1,500 00 \$140 for travelling expenses and \$200 rent.	Brantford.....	Six Nations of Grand River.
Cockburn, G. P.....	Indian Agent.....	300 00	Sturgeon Falls.....	Chippewas, Aus Sables, Kettle Point and Sarnia.
English, Adam.....	"	500 00	Sarnia.....	
Ferguson, W. J. C.....	Indian Land Agent.....	— Commission of 5 per cent on collections.....	Warton.....	Chippewas of Nawash, Cape Croker.
Gibson, J. A.....	Guardian of Islands.....	25 00	Malorytown.....	Thousand Islands.
Goulette, O. V.....	"	150 00	Canaroque.....	"
Hagan, Samuel.....	Indian Agent.....	500 00—\$60 office rent.	Thessalon.....	Thessalon, Mississagi River and Thessalon Tp.
Hill, H. M.....	Clerk, Indian Office.....	600 00	Brantford.....	
Hill, E. P.....	"	300 00	"	
Jamieson, A.....	"	400 00	Manitowaning.....	
Macleod, William Brown.....	Indian Supt.....	900 00 Commission of 5 per cent on collections; \$60 office rent.....	Manitowaning.....	
McDonald, Alex. R.....	Indian Agent.....	500 00	Parry Sound.....	Parry Island, Dokis, Henvey Inlet, Nipissing, Shawanaga, Temagaming and Watha (or Gibson).
McDonnell, J. B.....	"	500 00	Duart.....	Moravians of the Thames.
McDonnell, Neil.....	"	800 00	Walpole Island.....	Chippewas and Pottawatamies of Walpole Island.
McFarlane, William.....	"	325 00	Port Arthur.....	Ojibweas of Lake Superior, Western Division.
McGibbon, Charles.....	"	500 00	Keene.....	Mississaugas of Mud and Rice Lakes.
McIvor, John.....	"	500 00	Pentanguishene.....	Chippewas of Beausoleil, Christian Island.
McPhee, Duncan J.....	"	400 00	Milver.....	" Nawash, Cape Croker.
Mullin, Martin.....	"	60 00	Orelia.....	" Rama.
Nichols, W. L.....	"	825 00 With \$154.50 a year for office rent and fuel.....	Killaloe.....	Algomquins of Golden Lake.
Seedfield, John.....	Indian Agent.....	500 00	Sault Ste. Marie.....	Patchawann, Big Head or Michipicoten and Garden River.
Stms, C. L. D.....	"	1,000 00	Chippawa Hill.....	Chippewas of Saugeen.
	"		Manitowaning.....	Sucker Creek, Sigeziandah, South Bay, Maganetta wan, Point Grandin, Talgawann, Whitefish River, Whitefish Lake and unceded portion of Manitoulin Island.

6-7 EDWARD VII., A. 1907

RETURN A (2)—Of Officers and Employees of the Department of Indian Affairs on July 1, 1906.
OUTSIDE SERVICE.

ONTARIO—Continued.

Name.	Office.	Annual Salary, &c.	Address.	Bands or Reserves in Agency.
		¢		
Smith, W.	Clerk, Indian Office.	500 00	Brantford.	Chippewas Munisees and Oneidas of the Thames.
Sutherland, S.	Indian Agent.	600 00	Delaware.	Mississaguas of Ahwick.
Thackeray, John.	"	325 00	Rosemeath.	Chippewas of Cockburn Island. Shesheganing.
Thorburn, R.	"	600 00	Gore Bay.	Chippewas of Cockburn Island. Shesheganing.
Tucker, W. J.	Clerk, Indian Office.	720 00	Brantford.	Mississaguas of the Credit.
Van Loon, W. C.	Indian Agent.	600 00	Hagersville.	" Seaugog.
Williams, Albert W.	"	100 00	Port Perry.	Chippewas of Snake and Georgina Islands.
Yates, John.	"	350 00	Virginia.	Whitefish Lake, Serpent River and Spanish River Indians.
Arthur, R. H., M.D.	Medical Officer.	600 00—Paid by Bands and appro.		Thessalon River and Mississagi River.
Baxter, J., M.D.	"	300 00		Chippewas of Beausoleil.
Bowman, George, M.D.	"	200 00		Indians on Manitoulin Island.
Carruthers, John, M.D.	"	600 00		Golden Lake Band.
Chamounhouse, J., M.D.	"	200 00—Paid by Vote.	Eganville.	Indians on Walpole Island.
Hay, W. W., M.D.	"	500 00—Paid by Band.		Mississaguas of Ahwick.
Hayden, E. W., M.D.	"	275 00		Six Nations.
Holmes, C. U., M.D.	"	2,850 00	Oswegen.	Chippewas of Nawash.
Hough, H. A., M.D.	"	500 00		Algonquin Indians.
James, M., M.D.	"	200 00—Band, \$200; \$80 voted by Parliament.	Mattawa.	Indians on Manitoulin Island.
Johnston, J., M.D.	"	250 00—Paid by Band.		Garden River and Batchawana.
McCrae, A. S., M.D.	"	500 00		Mississaguas of the Credit.
McDonald, R., M.D.	"	350 00		Oneidas of the Thames.
Mitchell, F. H., M.D.	"	300 00—Voted by Parliament.		Fort William.
McGrady, J., M.D.	"	125 00—Paid by Band and Vote.		Chippewas of Rama.
McLean, John, M.D.	"	150 00		Moravians of the Thames.
McPhail, D. P., M.D.	"	300 00		Chippewas and Munisees of the Thames.
McEwen, J. A., M.D.	"	250 00—Band, \$200; \$60 voted by Parliament.		Mississaguas of Rice Lake.
McWilliams, V. H., M.D.	"	150 00—Paid by Band.		Mohawks of the Bay of Quinte.
Moore, John, M.D.	"	250 00		Chippewas of Snake Island.
Pringle, H. H., M.D.	"	150 00		Mohawks of the Bay of Quinte.
Passmore, W. J., M.D.	"	250 00		Mississaguas of Seaugog.
Proctor, E. L., M.D.	"	37 50		Indians on Manitoulin Island.
Walker, C. W., M.D.	"	1,000 00		

SESSIONAL PAPER No. 27

Williams, R. W., M.D.	"	300 00	Chippewas of Sanguen.
Merrill, J. W., M.D.	Voled by Parliament.	100 00	Indians between Chapleau and Pogamising.
Green, Rev. A. H.	"	500 00—Paid by Band	Mohawks of the Bay of Quinte.
Stans, H. S.	"	168 00	Serpent River and Spanish River.
QUEBEC.			
Bastien, Antoine O.	Indian Agent.	425 00	Hurons of Lorette: Quarante Arpents and Roemont reserves.
Beaulieu, E.	"	150 00—Commission of 5 p.c.	Anabesites of Cacoma.
Blain, Jean	"	600 00—\$60 for office rent.	Hurons of Caughnawaga.
Burwash, Adam	"	200 00	Lake Timiskaming.
Conrad, A. O., M.D.	"	300 00	Abenakis of St. Francis.
Dube, J. R.	"	100 00	" Beaucoueur.
Gagnon, Adolphe.	"	400 00	Lower St. Lawrence.
Long, George	"	50 00—Commission of 10 p.c. on land rent and 2½ p.c. on distribution.	
McCahey, Wm. J.	"	600 00	Hurons of St. Regis.
Marceau, A.	"	400 00	River Desert band, Maniwaki reserve.
Morin, Rev. J. D.	"	100 00	Montagnais of Lake St. John.
Scott, W. D. B.	"	400 00	Micmacs of Maria.
Petilland, Joseph.	"	200 00	Indians of Lower St. Lawrence.
Pitre, Joseph	"	200 00	Lake of Two Mountains.
McCarthy, F. W., M.D.	Medical Officer.	80 00	Micmacs of Restigouche.
Mathigan, E. A., M.D.	"	200 00—Paid by Parliament.	Micmacs of Gaspe.
Constantin, J. M.D.	"	500 00	River Desert band, Maniwaki reserve.
Clavien, E. A., M.D.	"	200 00	Pointe Bleue reserve.
Pelletier, J. A., M.D.	"	30 00	Chicoutimi and vicinity.
Piquet, L. G., M.D.	"	200 00	St. Urban, Charlevoix County.
Quinart, W., M.D.	"	100 00	Restigouche.
Arnaud, Rev. C.	Missionary.	500 00	Oka.
Rouquet, Rev. P.	"	125 00	Quebec.
De Couzague, Rev. Jos.	" (R.C.)	235 00	St. Regis.
Forbes, Rev. G.	"	100 00	Papineville.
Godbout, Rev. P. A.	"	425 00	Caughnawaga.
			Lorette.
NEW BRUNSWICK.			
Carter, Wm. D.	Indian Agent.	500 00	Richibucto.
Farrall, James	"	600 00	Allowed \$50 for office rent Fredericton.

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RETURN A (2).--Of Officers and Employees of the Department of Indian Affairs on July 1, 1906.

OUTSIDE SERVICE.

NEW BRUNSWICK *Continued.*

Name.	Office.	Annual Salary, &c.	Address.	Bands or Reserves in Agency.
		£		
Benson, J. S., M.D.	Medical Officer.	100 00	Chatham.	Northumberland Co., Burnt Church reserve.
Bosmond, J. E., M.D.	"	200 00	Newcastle.	" Red Bank and Eel Ground reserves.
Duncan, G. M., M.D.	"	100 00	Barthust Village.	Glochester Co., Barthust reserve.
Forbeson, A. G., M.D.	"	50 00	Bathurst.	Restigouche Co., Eel River reserve.
Laird, D. V., M.D.	"	40 00	Buctouche.	Buctouche reserve, Kent Co.
Legget, J. A., M.D.	"	200 00	Shediac.	Westmorland Co.
Earle, R. W., Jr., M.D.	"	300 00	Perth Centre.	Tobique reserve.
McAllister, D. H., M.D.	"	200 00	Sussex.	King's Co.
McGrath, R. H., M.D.	"	150 00	Fredericton.	"
McWilliams, L. J., M.D.	"	175 00	Reston.	Kent Co., Big Cove and Indian Island reserves.
Peake, James, M.D.	"	125 00	Camroto.	Westmorland Co.
Ross, J. D., M.D.	"	200 00	Moncton.	"
Sprague, T. F., M.D.	"	100 00	Woodstock.	"
Weaver, W. J., M.D.	"	100 00	Fredericton.	Kent Co., Big Cove reserve.
Bannon, Rev. E. J.	Missionary (R.C.).	100 00	Richibucto.	"
D'Amour, Rev. J. C.	"	40 00	Edmundston.	"
Morrissey, Rev. W.	"	100 00	Barthust Bridge.	"
La Motte, Rev. W.	"	100 00	Tobique.	"
Barnaby, Peter.	Constable.	12 00	Newcastle.	Northumberland Co., Eel Ground reserve.
Clare, A.	"	20 00	Reston.	Kent Co., Big Cove reserve.
Ellis, Joseph.	"	180 00	Andover.	Tobique reserve.
Swasson, Joseph.	"	24 00	Church Point.	Northumberland Co., Burnt Church reserve.
Ward, John.	"	12 00	Newcastle.	Eel Ground reserve.
Tenas, James.	"	12 00	Burnt Church.	Burnt Church reserve.
Perley, Peter.	Caretaker of Church.	50 00	Tobique.	"

NOVA SCOTIA.

Rockwith, Chas. E.	Indian Agent.	50 00	Steam Mills.	Micmacs of King's County.
Cameron, Rev. Angus.	"	75 00	Christmas Island.	Cape Breton Co., Eskasoni reserve.
Clashorn, Daniel.	"	50 00	Sheet Harbour.	Halifax County.
Fraser, Rev. John.	"	100 00	St. Peter's.	Richmond Co., Chapel Island reserve.
Barlow, Charles.	"	100 00	Caledonia.	Lunenburg and Queen's Counties; Bridgewater, New Germany, Chester, Malbone Bay and Lunenburg.

SESSIONAL PAPER No. 27

Person	Post	Salary	Residence	Remarks
Hipson, John	"	50 00	Shelburne	Shelburne County
Lacey, John	"	50 00	Annapolis	Annapolis County; Maitland and Millford reserve
McIntyre, D. K., M.D.	"	100 00	Sydney, C.B.	Cape Breton County; Cariboo Marsh, Sydney reserve, and North Sydney
Macdonald, Arch. J.	"	100 00	Baddeck	Antigonish and Guysborough Counties; Antigonish
McDonald, John R.	"	100 00	Heatherton	Antigonish
McLeod, Rev. John D.	"	100 00	New Glasgow	Antigonish
MacPherson, Rev. Donald	"	100 00	Glendale	Pictou County; Indian Cove reserve, Inverness County; Malagawatch and Whycoconagh reserves
Purdy, J. H.	"	50 00	Pear River	Dagby County; Indian Hill reserve
Rand, Fred. A., M.D.	Indian Agent	50 00	Parrishboro	Micmacs of Cumberland County; Franklin Manor reserve (Halfway river)
Smith, R. H.	Medical Officer	200 00	"	"
Wallace, Alonzo	Indian Agent	50 00	Turo	Colchester County; Millbrook reserve
Whalen, W. H.	"	50 00	Shubenacadie	Hants County; Indian Brook reserve
Bisset, C. F., M.D.	"	50 00	Yarmouth	Yarmouth County
Cole, W. H., M.D.	Medical Officer	125 00	St. Peters	Richmond County; Salmon River reserve
Jacques, H., M.D.	"	75 00	"	Queen's County
Morse, G. R., M.D.	"	50 00	Canning	King's County
Macaulay, J. A., M.D.	"	50 00	Chesler	Lambton County, East
MacDonald, Hugh N., M.D.	"	75 00	"	Inverness County; Malagawatch reserve
McDonald, D. M., M.D.	"	150 00	Whycoconagh	"
McIntyre, D. K., M.D.	"	325 00	Baddeck	Victoria County
McDonald W. H., M.D.	"	275 00	Sydney	Cape Breton County
McLean, E. D., M.D.	"	200 00	Antigonish	Antigonish
McMillan, J., M.D.	"	150 00	Shubenacadie	Hants County; Indian Brook reserve
Marsh, H. A., M.D.	"	75 00	Pictou	Pictou County
Miller, S. A., M.D.	"	75 00	Bridgewater	Lambton County, West
Withers, Russell, M.D.	"	50 00	"	Annapolis County
Yorston, F. S., M.D.	"	50 00	Annapolis	"
Black, B. M.D.	"	150 00	Turo	Colchester County; Millbrook reserve
Smith, J. W., M.D.	"	50 00	"	Hants County
Levitt, L. J., M.D.	"	100 00	Liverpool	Queen's
Ellerkin, E. J., M.D.	"	250 00	Pear River	Dagby
"	"	100 00	Weymouth	"
Arsenault, John O.	Indian Superintendent	500 00	Higgins Road	Lemon Island reserve, Richmond Bay; Morell reserve, King's County

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Arsenault, John O	Indian Superintendent	\$300 00	 Higgins Reed	Lennox Island reserve, rescue, King's Court	Richmond Bay ; Morrell
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RETURN A (2) Of Officers and Employees of the Department of Indian Affairs on July 1, 1906.

OUTSIDE SERVICE.

BRITISH COLUMBIA.

Name.	Office.	Annual Salary, &c.	Address.	Bands or Reserves in Agency.
		\$ cts.		
Vowell, Arthur W.	Indian Supt. and Reserve Com. for B.C.	3,200 00.	Victoria.	Williams Lake Agency.
MacLaughlin, W.	Senior Clerk.	1,900 00.	"	Cassiar "
Stevens, W. A.	Clerk.	1,200 00.	"	Kootenay "
Dalby, H. G.	"	840 00.	"	Kwakwewlth "
Cameron, A. L.	"	500 00.	"	Kamloops-Okanagan Agency.
McLachlan, D.	Messenger.	600 00.	"	Babine "
Bell, Ewen	Indian Agent.	1,200 00.	Clinton.	Fraser River "
Callineath, J. F.	"	600 00.	Telegraph Creek.	Northwest Coast "
Galbraith, Robert L. T.	"	1,200 00.	Port Steele.	West Coast "
Halliday, W. M.	"	1,200 00.	Alert Bay.	Cowichan "
Irvine, Archibald.	"	1,200 00.	Savona.	Kamloops "
Loring, Richard E.	"	1,200 00.	Hazelton.	Duncan's Station.
McDonald, R. C.	"	1,200 00.	New Westminster.	Ashcroft.
Morrow, G. W.	"	1,800 00.	Metlakahla.	Cowichan "
Nell, Alan W.	"	1,200 00.	Albert.	Cowichan "
Robertson, W. R.	"	1,200 00.	Duncan's Station.	Kamloops "
Saunders, G. M.D.	Medical Officer.	420 00.	Ashcroft.	Cowichan "
Dykes, Watson, M.D.	"	400 00.	Cowichan.	"
Drysdale, W. F., M.D.	"	500 00.	Nanaimo.	"
Millard, H. P., M.D.	"	240 00.	Comox.	"
Lange, R. W., M.D.	"	600 00.	Bella Bella.	"
Kergin, W. T., M.D.	"	720 00.	Port Simpson.	"
Jones, O. M., M.D.	"	500 00.	Victoria.	"
Wilson, T. A., M.D.	"	600 00.	Port Essington.	Indians generally.
McLean, Charles, M.D.	"	780 00.	Ucluelet.	"
Watt, Hugh, M.D.	"	480 00.	Port Steele.	West Coast Agency
Wrinch, H. C., M.D.	"	650 00.	Hazelton.	Kootenay "
Clarke, S., M.D.	"	480 00.	Lillooet.	Babine "
Mostyn-Hoops, S. E., M.D.	"	700 00.	150 Mile House.	Williams Lake "
Keller, H. L. A., M.D.	"	300 00.	Kilowia.	"
Williams, G., M.D.	"	300 00.	Vernon.	Kamloops "
White, R. E., M.D.	"	420 00.	Fairview.	"
Wade, M. S., M.D.	"	780 00.	Kamloops.	"

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Offehans, E. J., M.D.	"	210 00	Spallumcheen	"
Tutill, G. W., M.D.	"	480 00	Nicola	"
Byrdon-Jack, W. D., M.D.	"	1,200 00	Vancouver	Fraser
Elliot, C. A., M.D.	"	750 00	Harrison	"
Drs. Drew & Hall	"	1,200 00	New Westminster	"
Henderson, J. C., M.D.	"	400 00	Hedley City	"
Williams, H. A., M.D.	"	180 00	Chenamus	Kamloops
Rogers, H. B., M.D.	"	300 00	Pella Gola	Cowichan
Spencer, J. C., M.D.	"	300 00	Telegraph Creek	Northwest Coast Agency
Inglis, F., M.D.	"	500 00	Stevenson	Fraser Agency
Greer, R. F., M.D.	"	300 00	Ladner	"
King, A. A., M.D.	"	500 00	Mission City	"
Stuart, A. J., M.D.	"	720 00	Medakala	Northwest Coast Agency
Trenayne, H. E., M.D.	"	300 00	Quesnel	Williams Lake
Ford, E. C., M.D.	"	1,000 00	Vancouver	"
Green, A. E.,	Inspector of Indian Schools	600 00	New Westminster	Fraser Agency
McDonald, N.	Clerk	900 00	Quamichan	
O'Connell, Thomas	Constable			

MANITOBA, KEEWATIN, SASKATCHEWAN AND ALBERTA.

INDIAN COMMISSIONER'S OFFICE.				
Laird, Hon. David	Indian Commissioner	3,200 00	Winnipeg, Man.	
McKenna, J. A. J.	Asst. Indian Comm'r and Chief Inspect.	2,600 00	"	
Lash, J. B.	Secy. to Commiss F.	1,900 00	"	
Reid, J. Lestock, Sr.	Surveyor in charge of Indian reserve sur-veys in Alberta			
	Saskatchewan, Man-itoaba, Kewewatin and part of Onta-rio.	1,800 00	Ottawa	
McLean, J. K.	Asst. Surveyor	1,800 00	"	
Retourmay, Geo. A., M.A.	Clerk	1,300 00	Winnipeg, Man.	
Jean, G. B.	"	1,200 00	"	
Richardson, H.	"	1,000 00	"	
Robson, E.	Stenographer and Typewriter	720 00	"	
Gordon, M.	Typewriter	650 00	"	
Ivey, W.	Clerk	420 00	"	
Fewtrell, E. L.	Caretaker	141 00	"	
	TREASURY No. 8			
Cunroy, H. A.	Inspector	2,200 00	Ottawa	

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RETURN A (2)—Of Officers and Employees of the Department of Indian Affairs on July 1, 1906.
OUTSIDE SERVICE.

MANITOBA, KEEWATIN, SASKATCHEWAN AND ALBERTA—Continued.

Name.	Office.	Annual Salary, &c.	Address.	Bands or Reserve in Agency.
		\$. cts.		
Sommers, Rev. John	LAKE WINNIPEG INSPECTORATE. Inspector of Indian agencies and re- serves.	2,000 00	Stonewall, Man.	Clandeboye, Berens River, Rat Portage, Savanne and Fort Frances agencies.
Marlatt, Samuel R.	LAKE MANITOBA INSPECTORATE. Inspector of Indian agencies and re- serves.	2,200 00	Portage la Prairie, Man.	Portage la Prairie, Manitowapah, the Pas and Birtle agencies.
Campbell, M.	Farmer.	400 00	Swan Lake, Man.	
Ginn, J. C.	"	400 00	Dominion City, Man.	
Telfer, J. S.	Cartographer.	40 00	Portage la Prairie, Man.	
Logan, Robt.	TREASY No. 2. Indian Agent.	1,000 00	Portage la Prairie, Man.	Manitowapah agency : Sandy Bay, Lake Manitoba, Ebb and Flow Lake, Fairford, Sandy Bay (Treaty No. 2), Lake St. Martin, Crane River, Waterhen River and Pine Creek reserves.
Tucker, Geo.	Issuer.	40 00	Indian Ford, Man.	
Wright, J. P.	TREASY No. 3. Indian Agent.	1,200 00	Fort Frances, Ont.	Fort Frances Agency : Hungry Hall, Long Sault, Manitou, Little Forks, Couchiching, Strangecrook, Niacatchewin, Nickiecousemeneaming, Seine River and Lac la Croix.
McKenzie R. S.	Indian Agent.	1,200 00	Kenora, Ont.	Rat Portage and Savanne agencies.

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TREASY No. 5.					
Fischer, Fred.....	Indian Agent.....	900 00	The Pas, Sask.....	The Pas agency: Grand Rapids (Saskatchewan River), Chemawawin, Moose Lake, the Pas, Pas Mountain, Cumberland.	
Gilmore, Neil.....	Indian Agent.....	1,000 00	Norway House, Man.	Norway House Agency.	
Lewis, J. O.....	Indian Agent.....	1,000 00	Selkirk, Man.....	Claudeboye agency: St. Peter's, Brokenhead, Fort Alexander.....	
	SOUTH SASKATCHEWAN INSPECTORATE.				
TREASY No. 4.					
Graham, W. M.....	Inspector of Indian agencies and reserves.....	1,800 00	Balearrres, Sask.....	Pelly, Moose Mountain, Crooked Lake, Assiniboine Qu'Appelle and Touchwood agencies.	
	ALBERTA INSPECTORATE.				
	TREASY No. 7 AND PART TREASY No. 6.				
Markle, J. A.....	Inspector of Indian agencies and reserves.....	1,800 00	Gleichen, Alta.....	Edmonton, Hobbema, Stony, Surcou, Blackfoot, Blood and Peigan agencies.	
	NORTH SASKATCHEWAN INSPECTORATE.				
	TREASY No. 6.				
Chisholm, Wm. J.....	Inspector of Indian agencies and reserves.....	2,000 00	Prince Albert, Sask.....	Duck Lake, Carlton, Battleford, Union Lake, Saddle Lake agencies, and White Cap Sioux, Montreal Lake and Lac la Ronge reserves.	
Irvine, E.....	Transfer and Interpreter.....	350 00	"	"	
	Assiniboine Agency.				
Grant, W. S.....	Indian Agent.....	1,100 00	Sintahuta, Sask.....	Assiniboine reserve.	
Hasson, Jas.....	Farmer.....	480 00	"	"	
	Battleford Agency.				
Day, J. P. G.....	Indian Agent.....	1,000 00	Battleford, Sask.....	Red Phrasant's, Stony, Sweet Grass, Poundmaker's, Little Pine's, Moosomin's and Thunderbolt's reserves.	
Johnson, C. J.....	Clerk.....	600 00	"	"	
Vithorn, D.....	Farmer.....	480 00	"	"	
Warden, Jas.....	".....	480 00	"	"	

6-7 EDWARD VII., A. 1907

RETURN A (2)—Of Officers and Employees of the Department of Indian Affairs on July 1, 1906.

OUTSIDE SERVICE.

MANITOBA, KEEWATIN, SASKATCHEWAN AND ALBERTA—Continued.

Name.	Office.	Annual Salary, &c.	Address.	Bands or Reserves in Agency.
	<i>Battleford Agency</i>	\$ cts.		
	—Con.			
Suffern, A.	Farmer	480 00.	Battleford, Sask.	
Jefferson, R.	"	480 00.	"	
Desjardins, S.	Trainer & Interpreter	360 00.	"	
Tompkins, A.	Blacksmith.	600 00.	"	
Langlois, E.	Farmer.	480 00.	"	
Morin, P. O.	Overseer.	240 00.	"	Meadow Lake.
	<i>Birtle Agency.</i>			
Whitely, G. H.	Indian Agent.	1,200 00.	Birtle, Man.	Birtle, Oak River, Oak Lake, Turtle Mountain, Keeseekoowatin, Waywayseecappo, Valley River, Gambler's and Rolling River.
Armstrong, H. O.	Clerk.	720 00.	"	
Jones, F. J.	Trainer.	360 00.	"	
Yeomans, E. H.	Farmer.	800 00.	(Griswold, Man.)	
Indian.	Constable	60 00.	"	
	<i>Blackfoot Agency.</i>			
Sibbald, H. E.	Indian Agent.	1,000 00.	Gleichen, Alta.	Blackfoot Indians.
Dickinson, S. M.	Clerk and Issuer.	900 00.	"	
Laycock, J. L.	Farmer.	480 00.	"	
Jones, A. E.	"	540 00.	"	
Fox, P.	Interpreter.	300 00.	"	
White Elk, Arthur	Asst Farmer.	120 00.	"	
	<i>Blood Agency.</i>			
Wilson, R. N.	Indian Agent.	1,300 00.	Macleod, Alta.	Blood Indians.
Jowett, J. W.	Clerk.	900 00.	"	
Clark, G. H.	Stockman & Farmer.	600 00.	"	
Winder, G. D.	"	600 00.	"	
Hillier, E. G.	"	600 00.	"	
Healy, Joe.	Mail Carrier.	120 00.	"	
Webb, J. A.	Issuer.	540 00.	"	
Mills, D.	Interpreter.	420 00.	"	

SESSIONAL PAPER No. 27

Sister St. Eusebe.....	Hospital Matron.....	180 00.....	"	...	
" Bramigan.....	" Nurse.....	120 00.....	"	...	
" Girard.....	"	120 00.....	"	...	
<i>Carlton Agency.</i>					
Borthwick, T.....	Indian Agent.....	1,000 00.....	Mistawasis, Sask.....	Wm. Twatt's, Petequay's, Mistawasis, Ahitakakoo's, Kapahawekonum's, Kenemotayo's, Pelican Lake and Wahspaton Sioux reserves.	
Jackson, T. E.....	Clerk.....	720 00.....	"	"	
McKenzie, John.....	Miller.....	600 00.....	"	"	
Sanderson, J. G.....	Farmer.....	480 00.....	"	"	
Tucker, W. R.....	Overseer.....	240 00.....	Saskatoon, Sask.....	White Cap Sioux reserve.	
Pratt, Rupert.....	Interpreter.....	420 00.....	Mistawasis, Sask.....	Kenemotayo's reserve.	
Dreaver, J., sr.....	Farmer.....	480 00.....	"	Big River reserve.	
Settee, J. R.....	Overseer.....	60 00.....	Prince Albert, Sask.....	Montreal Lake.	
Dreaver John.....	Labourer.....	360 00.....	Mistawasis, Sask.....	Mistawasis.	
Islester, G. B.....	Farmer.....	480 00.....	"	Ahitakakoo's reserve.	
Beverley, L.....	"	300 00.....	Prince Albert.....	Wahspaton Sioux "	
<i>Crooked Lake Agency.</i>					
Millar, M.....	Indian Agent.....	1,300 00.....	Broadview, Sask.....	Ochapowace's, Kakewistahaw's, Cowessess and Sakinay's reserves.	
Sutherland, J. A.....	Miller & Blacksmith.....	650 00.....	"	"	
Sutherland, G. A.....	Farmer.....	480 00.....	"	"	
Hourie, Peter.....	"	480 00.....	"	"	
Cameron, Henry.....	Interp. and Translator.....	360 00.....	"	"	
Nichol, H.....	Clerk.....	600 00.....	"	"	
<i>Duck Lake Agency.</i>					
Macarthur, Jas.....	Indian Agent.....	1,000 00.....	Duck Lake, Sask.....	One Arrow, Okemassiss, Beady's, Cheecastapassin's, John Smith's, James Smith's and Cumberland reserves.	
Price, Jos. H.....	Clerk and Farmer.....	600 00.....	"	John Smith's.	
Marion, Lewis.....	Farmer.....	480 00.....	"	"	
Campbell, A.....	"	480 00.....	"	"	
Gardapio, H.....	Interpreter.....	300 00.....	"	"	
Adams, H.....	Farmer.....	480 00.....	"	Jas. Smith's	
Hamilton, P. J.....	"	800 00.....	Melford, Sask.....	Kimistino's reserve.	
<i>Edmonton Agency.</i>					
Gibbons, James.....	Indian Agent.....	1,000 00.....	Edmonton, Alta.....	Enoch's, Alexander's, Joseph, White Whale Lake and Paul's reserves.	
Black, W.....	Clerk.....	650 00.....	"	"	
Bard, D.....	Farmer.....	480 00.....	"	"	
Foley, John.....	Interpreter.....	420 00.....	"	"	
Pattison, A. E.....	Farmer.....	480 00.....	"	"	

6-7 EDWARD VII., A. 1907

RETURN A (2)—Of Officers and Employees of the Department of Indian Affairs on July 1, 1906.

OUTSIDE SERVICE.

MANITOBA, KEEWATIN, SASKATCHEWAN AND ALBERTA.

Name.	Office.	Annual Salary, &c.	Address.	Bands or Reserves in Agency.
<i>Hobdena Agency.</i>				
Mann, G. G.	Indian Agent.	1,200 00	Ponoka, Alta.	Samson's, Ermineskin's and Louis Bull's lands.
Hollies, J.	Clerk.	650 00	"	
Perry, A. W.	Farmer.	480 00	"	
Lucas, T. W.	"	480 00	"	
Blanc, H.	Timster & Interpreter	420 00	"	
Indian.	Miller & Teamster.	120 00	"	
"	Mail Carrier.	120 00	"	
Ferguson, Geo.	Blacksmith.	480 00	"	
<i>Moose Mountain Agency.</i>				
Cory, Thos.	Farmer in charge.	720 00	Carlyle, Sask.	Pheasant Rump's, Striped Blanket's and White Bear's reserves.
Bowman, Jos.	Farmer.	480 00	"	
<i>Onion Lake Agency.</i>				
Shibald, W.	Indian Agent.	1,000 00	Onion Lake, Sask.	Seckaskootch and Chipewyan No. 124, reserves.
Slater, T. J.	Farmer.	480 00	"	
Taylor, Joseph.	Engineer.	420 00	"	
Turner, L. E.	Clerk.	600 00	"	
Vivier, W.	Interpreter.	180 00	"	
<i>Pegagan Agency.</i>				
Gooderham, J. H.	Indian Agent.	1,100 00	Macleod, Alta.	Pegagan Indians.
Race, G. H.	Clerk and Issuer.	650 00	"	
Macdonald, R. C.	Stockman.	600 00	"	
English, J.	Interpreter.	300 00	"	
Indian.	Mail Carrier.	120 00	"	
<i>Pelly Agency.</i>				
Carruthers, H. A.	Indian Agent.	1,100 00	Kamsack, Sask.	Cote's, Key's and Keesekoos reserves.
Blewett, W. G.	Clerk.	600 00	"	
Rattray, W. S.	Farmer.	600 00	"	

SESSIONAL PAPER No. 27

Brass Jno.	Labourer.	350 00	"	Fishing Lake.
Pratt, Josiah.	Farmer.	350 00	Kuroki, Sask.	"
Severight, P.	Mail Carrier.	66 00	Kamsack, Sask.	"
<i>Qu'Appelle Agency.</i>				
Gordon, Wm.	Indian Agent.	900 00	Palestines, Sask.	Little Black Bear's, Star Blanket's, Okanase, Peo-
Tye, A. W.	Clerk.	350 00	"	peckeosis, Papiot's, Muscowequan's, Pasqua's
Joe Ironquill.	Interpreter.	350 00	"	and Standing Buffalo's reserves.
Peck, G. W.	Stockman.	480 00	"	
Davidson, W. F.	Farmer.	600 00	"	
D. S. Rattray.	"	480 00	"	
A. H. Miles.	"	600 00	"	
Lanes, Thos.	"	480 00	"	
<i>Saddle Lake Agency.</i>				
Batty, J.	Indian Agent.	900 00	Saddle Lake, Alta.	Saddle Lake, Wahstanow, Whitefish Lake, Lac la
Tompkins, P.	Farmer.	650 00	"	Piche, Chipewyan No. 130 and Beaver Lake
H. T. Niblock.	"	480 00	"	reserves.
Whitford, S.	Interpreter.	350 00	"	
Carroll, I. W.	Clerk.	300 00	"	
Erasmus, P.	Asst. Farmer.	420 00	"	
<i>Sarcee Agency.</i>				
McNeill, Alex. J.	Indian Agent.	1,200 00	Calgary, Alta.	Sarcee reserve.
Hodgson, George.	Interpreter.	480 00	"	
Indian.	Scout.	120 00	"	
Onesied, John.	Stockman.	350 00	"	
Indians (3).	Herders.	540 00	"	
<i>Stony Agency.</i>				
Fletcher, T. J.	Indian Agent.	1,100 00	Morley, Alta.	Stony reserve.
Papine, A. M.	Stockman.	180 00	"	"
Schmidt, E.	Interpreter.	420 00	"	"
	Labourer.	120 00	"	"
<i>Touchwood Hills Agency.</i>				
Marison, W.	Agent.	1,000 00	Kutawa, Sask.	Muscowequan's, George Gordon's, Day Star's, Poor
Stanley, E.	Clerk.	600 00	"	Man's.
Robinson, W. E. H.	Farmer.	180 00	"	
Peat, Chas. T.	Interpreter.	350 00	"	
Finlayson, J. D.	Farmer.	480 00	"	
Anderson, W. P.	"	480 00	"	

6-7 EDWARD VII., A. 1907

RETURN A (2)—Of Officers and Employees of the Department of Indian Affairs on July 1, 1906.

OUTSIDE SERVICE.

MANITOBA, KEEWATIN, SASKATCHEWAN AND ALBERTA *Continued.*

Name.	Office.	Annual Salary, &c.		Address.	Bands or Reserves in Agency.
	<i>Medical Officers.</i>	\$	cts.		
Hanson, Thos. M.D.	Medical Officer.	900	00	Rat Portage, Ont.	Rat Portage agency.
Moore, Robert, M.D.	"	450	00	Fort Frances, Ont.	Fort Frances "
Steep, J. R., M.D.	"	800	00	Winnipeg, Man.	Claudeboye agency.
Devoran, H. E., M.D.	"	480	00	Red Deer, Alta.	Red Deer industrial school.
Edwards, O. C., M.D.	"	1,800	00	Macleod, Alta.	Blood and Peigan reserves.
Fraser, M. S., M.D.	"	480	00	Brandon, Man.	Brandon industrial school.
Goodwin, R., M.D.	"	200	00	Elkhorn, Man.	Elkhorn industrial school.
Lafferty, J. D., M.D.	"	1,800	00	Calgary, Alta.	Blackfoot, Sarcsee and Stony agencies, and High River and Calgary industrial schools.
Macadam, S. T., M.D.	"	900	00	Battleford, Sask.	Battleford agency and industrial school.
H. Harvey, M.D.	"	600	00	Lebret, Sask.	Qu'Appelle industrial school.
Bird, James R., M.D.	"	600	00	Whitewood, Sask.	Crooked Lake agency.
Matheson, E., M.D.	"	180	00	Onion Lake, Sask.	Onion Lake agency.
Labrecque, J. J. A., M.D.	"	150	00	Prince Albert, Sask.	Emmanuel College.
A. W. Thomson, M.D.	"	500	00	Regina, Sask.	Regina industrial school.
Kalbfleisch, W. H., M.D.	"	600	00	Balgonic, Sask.	Pipnot, Pasqua's and Muscowpetung's reserves.
Reid, J. L., M.D.	"	600	00	Prince Albert, Sask.	John Smith's Sioux, Sturgeon Lake, W. Charles & Jas. Roberts Reserves.
Hardy, John G., M.D.	"	300	00	Carlyle, Sask.	Moose Mountain agency.
Gauthier des Rues, M.D.	"	500	00	Duck Lake, Sask.	Boarding school and reserves.
Larose, A., M.D.	"	900	00	The Pas, Sask.	Pas agency reserves.
Tierney, J. A., M.D.	"	950	00	St. Albert, Alta.	St. Albert boarding school, Edmonton agency.
Drs. Turnbull & McCulloch.	"	250	00	Moose Jaw, Sask.	Moose Jaw Sioux.
West, C. H., M.D.	"	1,200	00	Lesser Slave Lake, Alta.	Treaty 8.
Hall, W. R., M.D.	"	480	00	Kinstino, Sask.	Jas. Smith's reserve.
Wallace, J. J., M.D.	"	400	00	Kamsack, Sask.	Pelly agency.
Bourgeault, V., M.D.	"	500	00	Marcelin, Sask.	Carlton agency.

SESSIONAL PAPER No. 27

APPROPRIATION ACCOUNTS.

1905-06.

Sub-Vote.	Grant.	Expenditure	Grant not used.	Grant exceeded.
	\$ cts.	\$ cts.	\$ cts.	\$ cts.
ONTARIO AND QUEBEC.				
Relief, medical attendance and medicines, Quebec....	5,600 00	5,596 49	3 51	
Blankets and clothing, Ontario and Quebec.....	3,300 00	2,439 84	860 16	
Schools, Maritime Provinces, Ontario and Quebec....	500 00	498 41	1 59	
Salaries of Chiefs, Cape Croker and Gibson, and Agent at St. Regis.....	49,230 00	49,675 09		445 09
Payment of Robinson Treaty Annuities.....	150 00	150 00		
Survey of Indian Reserves.....	12,450 00	12,450 00		
Indian Land Management Fund.....	500 00	478 82	21 18	
Grant for Agricultural Society, Munsees of the Thames.	14,000 00	14,000 00		
Erection of lock-up, St. Regis.....	90 00	90 00		
General legal expenses.....	500 00		500 00	
Repair of roads.....	8,500 00	1,685 97	6,814 03	
Annuity, gratuity and expenses, Treaty 9.....	2,700 00	2,699 49	0 51	
Squatters improvements on Doncaster Reserve.....	29,200 00	27,064 12	2,135 88	
For the completion of work of constructing pavilions and wharfs and for the purchase of lands taken for park purposes, 1,000 Islands in River St. Lawrence..	100 00	100 00		
To recoup Rev. J. Gagne for travelling expenses incurred in interests of Indians of Maria.....	3,350 00	2,816 79	533 21	
	500 00	500 00		
	130,670 00	120,245 02	10,870 07	445 09
NOVA SCOTIA.				
Salaries.....	1,225 00	1,164 60	60 40	
Relief and seed grain.....	2,700 00	2,712 62		12 62
Medical attendance and medicines.....	3,700 00	3,698 28	1 72	
Miscellaneous and unforeseen.....	300 00	298 07	1 93	
Repairs to roads on reserves.....	450 00	450 00		
	8,375 00	8,323 57	64 05	12 62
NEW BRUNSWICK.				
Salaries.....	1,408 00	1,408 00		
Relief and seed grain.....	2,500 00	2,484 25	15 75	
Medical attendance and medicines.....	3,500 00	3,480 50	19 50	
Miscellaneous and unforeseen.....	600 00	442 46	157 54	
	8,008 00	7,815 21	192 79	
PRINCE EDWARD ISLAND.				
Salaries.....	300 00	300 00		
Relief and seed grain.....	925 00	644 06	280 94	
Medical attendance and medicines.....	650 00	900 50		250 50
Office and miscellaneous.....	75 00	6 01	68 99	
	1,950 00	1,850 57	349 93	250 50
BRITISH COLUMBIA.				
Salaries.....	23,360 00	23,404 24		44 24
Relief.....	8,000 00	7,246 10	753 90	
Seed.....	1,000 00	544 51	455 49	
Medical attendance and medicines.....	20,000 00	20,709 08		709 08
Day schools.....	11,400 00	11,478 24		78 24
Industrial and boarding schools.....	87,500 00	78,232 72	9,267 28	
Travelling expenses.....	6,600 00	5,843 39	756 61	
Office and miscellaneous, hospital and dyking and suppression of liquor traffic.....	13,986 00	13,268 38	717 62	
Surveys and Reserve Commission.....	2,500 00	1,100 20	1,399 80	
	174,346 00	161,826 86	13,350 70	831 56

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APPROPRIATION ACCOUNTS—*Concluded.*

1905-06.

Sub-Vote.	Grant.	Expenditure	Grant not used.	Grant exceeded.
	\$ cts.	\$ cts.	\$ cts.	\$ cts.
GENERAL				
Salaries of inspectors.....	4,300 00	4,300 00	.....	
Travelling expenses and clerical assistance.....	2,200 00	1,413 06	786 94	
Printing and stationery, outside service.....	6,000 00	5,997 39	2 61	
	12,500 00	11,710 45	789 55	

INDIANS OF MANITOBA AND NORTHWEST PROVINCES AND TERRITORIES, 1905-6.

Sub-Vote.	Grant.	Expenditure	Grant not used.	Grant exceeded.
	\$ cts.	\$ cts.	\$ cts.	\$ cts.
Annuities and commutations.....	141,365 00	141,175 00	190 00	
Implements, tools and hardware.....	6,832 00	6,827 64	4 36	
Field and garden seeds.....	3,564 00	3,563 16	0 84	
Live stock.....	31,253 00	31,218 10	34 90	
Supplies for destitute and working Indians.....	170,521 00	154,843 64	15,677 36	
Tuennial clothing.....	2,586 00	2,135 79	444 21	
Day, boarding and industrial schools.....	345,122 00	345,331 60		209 60
SURVEYS.....	17,700 00	17,657 61	42 39	
Sioux.....	10,683 00	5,029 71	5,653 29	
Grist and sawmills.....	657 00	619 54	37 46	
General expenses.....	169,900 00	170,024 94	.....	124 94
Total.....	900,177 00	878,426 73	22,084 81	334 54

INDIANS OF YUKON DISTRICT.

Supplies for destitute Indians.....	8,000 00	4,567 00	3,433 00
Day and boarding schools.....	5,000 00	3,644 93	1,355 07
Total.....	13,000 00	8,151 93	4,848 07

INDIAN TRUST FUND.

RETURN C showing transactions in connection with the Fund during the year ended June 30, 1906.

Service.	Debit.	Credit.
	\$ cts.	\$ cts.
Balance to June 30, 1905.....		4,545,756 53
Collections on land sales : timber and stone dues ; rents, fines and fees.....		548,992 18
Interest for year ended June 30, 1906, on above balance.....		181,612 16
Legislative grants to supplement the funds.....		26,900 00
Outstanding cheques for 1905-6.....		71 93
Expenditure during the year 1905-6.....	134,113 80	
Balance, June 30, 1906.....	1,808,622 00	
	5,802,735 80	5,802,735 80

For further details of the above expenditure from the Indian Trust Fund and the Consolidated Fund, see Part J of the Auditor General's Report.

REPORT
OF THE
ROYAL NORTHWEST MOUNTED POLICE
1906

PRINTED BY ORDER OF PARLIAMENT



OTTAWA

PRINTED BY S. E. DAWSON, PRINTER TO THE KING'S MOST
EXCELLENT MAJESTY

1907

*To His Excellency the Right Honourable Sir Albert Henry George, Earl Grey,
G.C.M.G., &c., &c., Governor General of Canada.*

MAY IT PLEASE YOUR EXCELLENCY :

The undersigned has the honour to present to Your Excellency the Annual Report of the Royal Northwest Mounted Police for the year 1906.

Respectfully submitted,

WILFRID LAURIER,
President of the Council.

December 6, 1906.

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ROYAL NORTHWEST MOUNTED POLICE, HEADQUARTERS,
REGINA, November 23, 1906.

To the Right Honourable

Sir WILFRID LAURIER, P.C., G.C.M.G., &c.,
President of the Privy Council.
Ottawa, Ont.

SIR,—I have the honour to submit the following report on the work of the Royal Northwest Mounted Police, for eleven months, ending October 31, 1906, together with the reports of the following officers:—

Superintendent R. B. Deane, commanding Calgary District.

“ G. E. Sanders, D.S.O., commanding Regina District.

“ P. C. H. Primrose, commanding Macleod District.

“ J. O. Wilson, commanding Lethbridge District.

“ J. V. Begin, commanding Prince Albert District.

“ J. A. McGibbon, commanding Battleford District.

Inspector H. J. A. Davidson, commanding Maple Creek District.

“ D. M. Howard, commanding McKenzie River District.

“ D'Arcy E. Strickland, commanding Fort Saskatchewan District.

Surgeon G. P. Bell, Senior Medical Officer.

Inspector J. F. Burnett, Veterinary Surgeon.

Before the erection of the provinces of Alberta and Saskatchewan, the maintenance of law and order in the Northwest Territories, rested with the Dominion government, and this force was charged with that duty. To the provincial governments this duty passed. By agreement between the Dominion government and the provincial governments we continued to carry on the work, pending a decision by the provincial governments as to whether they desired a continuance of the force in the new provinces. Section 33, of the Mounted Police Act, 1894, authorizes the Governor in Council to enter into arrangements with the government of any province of Canada for the use or employment of the force, and to agree upon the amount of money which shall be paid by each province for such services.

Under the authority of this section, you instructed the Comptroller to interview the Alberta and Saskatchewan governments on this subject. The Comptroller, accompanied by myself, met the members of the Alberta government, at Red Deer, on April 17, and the members of the Saskatchewan government at Regina, on April 20.

The conference resulted in an arrangement being entered into between both provincial governments and the Dominion government, whereby the latter agreed to maintain a strength of 500 in the two provinces, each provincial government to contribute the sum of \$75,000 for the service, and the balance of the cost of maintenance to be paid by the Dominion: the control of the force to remain with the Dominion, and, in the execution of their duties relating to the administration of justice, to be subject to the orders of the Attorney's General: this arrangement to be continued for five years, expiring on March 31, 1911.

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We have now been working under this arrangement for six months in a most satisfactory way, and with an entire absence of friction in both provinces. The provincial departments have thoroughly supported us, and, on the other hand, I think the force has striven to carry out their instructions with zeal.

If I may venture to express any opinion, I would say that the present arrangement is an advantageous one for the provinces, as well as for the Dominion. The immediate withdrawal of this force, in the very height of the rapid settlement, would have caused a feeling of unrest and disquiet, prejudicial to all interests.

I cannot avoid expressing a feeling of satisfaction that the Legislature and the people approved so heartily the continuance of the force, and that those with whom we had worked, and who knew us best, when they had the chance, should have shown such confidence in the Royal Northwest Mounted Police.

In the Yukon Territory and the re-organized Northwest Territories, consisting of the McKenzie, Franklin, Keewatin and Ungava districts, our duties remain as heretofore.

The work of the force is ever growing, but our strength does not increase, and the duties fall more heavily on the individual members.

The west is growing. New areas are coming under settlement, new towns are springing up, and railways are extending. With it all our burdens grow heavier. I endeavour, as best I can, to meet these conditions, but not to my satisfaction. I bear witness, however, to the cheerful way in which our men have responded.

The ordinary police duties would try us to faithfully perform, but when to these are added the maintenance of eight common jails, the attendance upon judges and magistrates, the escorting of prisoners and lunatics, the service of subpoenas, and the multifarious duties for other departments of the government, then they tax us to the utmost.

THE PEACE RIVER YUKON TRAIL.

Under your instructions, we commenced last year to construct a pack trail from Fort St. John, B.C., to the Yukon Territory. Ninety-four miles were completed when the heavy snow compelled the detachment under Inspector Richards to go into winter quarters. A small detachment, under Corporal McLeod, proceeded to Fort Graham and wintered there. The detachment experienced difficulties and hardships in making the trip. They first attempted to cross the mountains via Laurier pass, but, owing to lack of a guide, and deep snow, were forced to return to Fort St. John. Undaunted, they pushed up the Peace river, and, although the ice was running strong, succeeded in reaching Fort Graham. During the winter they made extensive patrols.

Their presence at Fort Graham last winter was fortunate. The small tribe of Indians there were in great distress for want of food. Corporal McLeod, with that self-reliance and good judgment, which our men in isolated positions of responsibility so often develop, advanced them sufficient provisions to allow them to go to their hunting grounds, and thus avoided a threatened raid on the Hudson's Bay Company's trading post.

During the winter, Inspector Richards, in accordance with Superintendent Constantine's instructions, forwarded sufficient supplies, by sled, to the end of the trail, ready for the opening of the work. In order that the horses would be fit to do this, oats had to be sent in. A party under Corporal Munroe, left Fort Saskatchewan on January 3, with 12,000 pounds of oats for Fort St. John, 570 miles distance. They reached Lesser Slave lake on January 15. Inspector West took over the party, and left on January 19, for Peace River Landing, reaching there on January 23.

The weather was extremely cold, the thermometer falling to 62° below zero on the 22nd.

Sergeant Wilson took command from Peace River Landing, leaving there on January 29, and arriving at Fort St. John on February 16, after a most arduous and trying trip; the weather was very cold, trail unbroken, sleighs constantly breaking

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because of contact with stumps of trees, and horses becoming exhausted. Nevertheless they persevered, and accomplished their work.

Early in May, Inspector Richards moved from winter quarters to the end of the trail, and commenced work, which was steadily pushed on.

On July 27, Inspector Camies took over command from Inspector Richards, who was relieved at his own request, because of bad health. I wish to bring to your notice the excellent work of Inspector Richards while in command. He exhibited ability and perseverance, and is deserving of especial commendation.

The work was continued with energy, and on August 23, the trail was completed to Fort Graham, 208 measured miles from Fort St. John.

The party was now split up, part to continue the trail west, and the remainder were employed building barracks and cutting hay for the winter.

The last report received was dated September 25, in which Inspector Camies states he had completed the trail 20 miles west of Fort Graham towards Bear lake, making a total of 131 miles for the season's work.

On September 10, a party of six men and twenty-three horses left for Peace River Landing, it having been found impossible to cut sufficient hay for the winter, and on the 25th, it was followed by another of three men and fifteen horses.

One officer, 15 N. C. officers and constables and 19 horses remained at Fort Graham for the winter, where they are comfortably quartered and well supplied with provisions, but in serious want for clothing. The clothing was despatched in good time, but only reached Fort St. John. Inspector Camies reports that he can get plenty of moose skins, and therefore the men will not suffer.

Both Inspectors Camies and Richards have nothing but praise for the N.C. officers and men. Inspector Camies says:—

'There have been no breaches of discipline; they are active, willing, and well-behaved; they work well, and without a murmur at the hardest of work, there is no shirking, although the men are often wet through a few minutes after leaving camp in the morning for their work, and returning in the same condition at night.'

The route of the trail from Fort Graham on, was the subject of much consideration. To obtain necessary information of northern British Columbia, Superintendent Sanders was ordered to Hazelton in June, to investigate conditions along the government telegraph line to the Yukon, and ascertain what were the facilities for provisions and forage.

A patrol was ordered to proceed from White Horse to Hazelton to report upon the route. Inspector Macdonell, with two men and eight ponies, left White Horse on July 18, and arrived at Hazelton on September 6, having travelled upwards of 650 miles. His recommendation was as follows:—

'Route recommended.—Leaving Atlin, follow wagon road to McKee creek, then crossing creek, keep straight on, crossing O'Donnell river, then follow Black Pine ridge to Indian trail to Nakina river, crossing opposite telegraph station, then follow pack train to where it joins McKenzie & Mann's pack trail, three miles north of Nahlin river, then follow McKenzie & Mann's pack trail to Telegraph creek.

'Then crossing Stikine river, three miles above mouth of Telegraph creek, take Old Cattle trail to Black Water where it joins Government Pack trail to Hazelton.

'Ten men with proper equipment starting from Atlin July 1, will open trail to Nahlin river where it joins McKenzie & Mann's pack trail, in one season.

'Six men starting from Telegraph creek July 1, would open trail south to Klappan river, in one season.

'Six men starting from Hazelton, June 15, would open trail north from Black Water to Klappan in one season.

'If this is done, and pack trail from Omineca mines to Hazelton is followed, it would give open trail from Manson creek to Atlin, distance 790 miles, leaving only that portion from St. John to Manson creek to be opened up. This would follow the trails most prospectors take, and keep in touch with what little civilization there is, and

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touch all navigable streams where supplies can be replenished, and keep you in touch with telegraph communication from nine miles south of Hazleton to 5th Cabin, and from Telegraph creek to Atlin.'

It is considered advisable to cut a trail from Fort Graham to Cabin No. 5, on telegraph line, for, by so doing, supplies could be easily obtained from Hazleton and Telegraph creek, both points being connected by river boats with ocean ports, and also, connection is had with the telegraph stations.

The country between Fort Graham and No. 5 post is unknown, and it is possible a practicable route may not be found. I attach extract from Inspector Richard's report.

WORK IN THE ARCTIC.

Inspector Howard and the detachment under his command have performed excellent service in the Arctic regions. His small detachment of six men has been divided between Fort McPherson and Herschel island, some 200 miles apart.

The whaling fleet was caught in the ice and compelled to winter in the Arctic. Five ships, with crews numbering 230 men, wintered at Herschel island. Instructions were sent by our winter patrol from Dawson to Inspector Howard, to take such steps as he deemed necessary to prevent suffering amongst the fleet, as some of the ships had not been provisioned for the winter. This officer was at Fort McPherson when these orders were received by him. He proceeded to Herschel island at once, investigated conditions and returned to Fort McPherson, making the round trip of 530 miles in three weeks in an Arctic mid-winter. His reports were despatched from Fort McPherson on March 10, by patrol to Dawson. They reached Regina on April 26, and were printed as a supplement to the annual report of last year.

The patrol from Dawson consisted of Staff-sergeant Fitzgerald, Corporal Mapley, and Constables Forrest and Walker. This patrol of 1,500 miles from Dawson to Herschel island and return, in the Arctic circle, in mid-winter, was no mean performance, and speaks volumes for the courage and endurance of all.

Inspector Howard, after forwarding his despatches, returned with Staff-sergeant Fitzgerald to Herschel island, arriving there on April 16.

He was fortunately able to secure temporarily, comfortable quarters, belonging to the Pacific Steam Whaling Co., San Francisco. We have since opened negotiations for the purchase of these buildings, and the owners have consented to sell, the value to be arranged between our officer and the agent of the company at Herschel island.

I attach several reports from Inspector Howard, which show that the presence of the police at Herschel island was most desirable, both for the unfortunate crews, and for the preservation of law and order.

The only serious occurrence happened on the *Olga*, which wintered several hundred miles east of Herschel island, in Canadian waters. The captain of the ship shot and killed the engineer. The result of the investigation held by Inspector Howard on this has been forwarded to the Commissioner of the Northwest Territories for instructions as to the action to be taken by us.

The expense of maintaining this small force of police in these distant regions is very heavy, but is more than justified by the services rendered, and makes good the proud boast of Canada, that there is no point too far distant in her vast country for the long and strong arm of the law to reach.

HUDSON'S BAY.

It is a long cry from the Beaufort sea to the waters of Hudson's bay, but here the same arduous duty was being repeated by 'M' Division, under the command of Superintendent Moodie.

Staff-sergeant Hayne, with a small detachment, wintered at Fullerton.

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Two noteworthy patrols were made during the winter, one to the head of Chesterfield inlet, under Corporal Rowley, a 350-mile trip, and the other under Constable Seller, to Lyon's inlet, a 955-mile trip. I invite your attention to the reports of these strenuous men, which speak so modestly and yet so eloquently of difficulties encountered and overcome, and hardships endured, that I cannot but feel proud of being their comrade.

Superintendent Moodie wintered in eastern Canada, and in August sailed again in the ss. *Adventure*, with supplies for Fort Churchill, reaching Fullerton on August 18. The ship remained there until August 31, and unloaded 5,000 sacks of coal, when it proceeded to Fort Churchill, arriving there on September 2, and remaining until October 1, when it sailed, leaving Superintendent Moodie and his small division to winter at Fort Churchill. A large quantity of coal and building material and general supplies were landed by boat and barge, with great labour. Unfortunately all the coal was not landed, as the captain of the *Adventure* decided that he could not risk remaining longer in the Hudson bay. The ship reached St. John's, Newfoundland, without adventure.

Superintendent Moodie selected a spot for the new post, a mile above the old Prince of Wales Fort, and at the date of his report, September 30, had made fair progress with the buildings. He would undoubtedly have his men comfortably housed before severe weather set in.

To establish connection with Fort Churchill two detachments of three men each have been established at Norway House and Split lake.

A patrol will leave Regina with mail and despatches for Fort Churchill about December 7, if the lakes are safely frozen up by that date. It will take three months to make the trip, being about 1,500 miles, travelling with dogs.

NORTHERN ALBERTA.

The work of 'N' Division, in Northern Alberta, remote from railways and settlements, is hard and difficult. As an instance of this, I take the following extract from a report of Sergeant Field, stationed at Fort Chipewyan, dated January 30, 1906:—

'A few days before Christmas, some of the Indians from the north were coming into Chipewyan. A man named William Brown found out where they were going and immediately followed them, carrying neither provisions or blankets with him. The Indians gave him food and bedding until he arrived at the settlement. He turned up at Chipewyan on December 23, without food, bedding, or money to purchase anything with, also being a total stranger to everybody. Mr. Colin Fraser told him that he could stay at his place until he was ready to go back to his camp again.

'December 26, Mr. Fraser sent word to me to come over and see this man Brown, as he was acting in a very strange manner. I went across immediately, but Brown was nowhere to be seen. I went out in search of him, and found him wandering about on the lake. I saw at once that the man was insane and unfit to be at large. I took him across and confined him in the guard-room. I thought possibly after a few days' rest and good food he would get around again. The following day he was very quiet, eating but very little, and from then until the end of the month he would eat a little food now and again.

'January 2, he took a very bad turn, becoming a raving maniac, refusing food or nourishment of any kind. I made preparations and left for Fort Saskatchewan as soon as possible with him, as I saw he required medical attendance.

'January 11, I left Chipewyan with Lunatic Brown and Special Constable Daniels and the detachment dog train, I also had to hire another man with his team of dogs to carry the provisions and dog food for the trip.

'Brown improved wonderfully on the trip out. I made him walk about eight or ten miles every day. This gave him a fairly good appetite, and he rested well at night. I arrived at Lac la Biche January 24. I left the train dogs here with the Hudson's

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Bay Company, to be fed until my return. I hired a team and left the following day for Fort Saskatchewan, arriving there on January 29. The trip out was uneventful, with the exception of the usual snow storms and intense cold weather.'

The round trip was over 1,000 miles.

PATROL OF LAKE WINNIPEG.

A patrol, under Inspector Walke, was maintained on Lake Winnipeg, in the steamer *Redwing*, from June 1, until September 21, 1906. It visited all the Indian reserves, and attended all the treaty payments. It had a beneficial effect, as it prevented the sale of intoxicants to Indians.

The steamer *Redwing* has been found too small for the boisterous waters of Lake Winnipeg, and a recommendation has been made to transfer her to Lake of the Woods, and to build a stancher and swifter craft for the work on Lake Winnipeg.

STRIKE AT LETHBRIDGE.

The miners employed in the Alberta Railway and Irrigation Coal Mines at Lethbridge, went out on strike early in March, last, and are still out.

For some time a strong force of police was kept at the mines to protect the works from injury and the employees from assault and intimidation. The miners are mostly foreigners, and, in the beginning, were in an aggressive mood. Several conflicts occurred between them and the police, which might have ended seriously had it not been for the determination, tact, and patience of officers and men.

They gradually quieted down until we were able to remove all but one constable, who remained at the request of the company, with a number of special constables in the company's employ.

Throughout the troubles we maintained a strictly neutral position, favouring neither side.

CAPTURE OF TRAIN ROBBERS IN BRITISH COLUMBIA.

Superintendent Deane's report gives a detailed account of this creditable work by Staff-sergeant Wilson and the detachment of 'E' division under his command.

I venture to call your special attention to the energetic manner in which they went about it, and the bold and courageous way in which they carried it through.

Rewards of \$5,000 were offered by the Dominion government and the Canadian Pacific Railway Company, and \$1,500 by the British Columbia government, in all \$11,500 for the capture of the robbers. On behalf of the members of the force who effected the capture, I applied for the rewards, but I have not received any portion, nor have I been informed whether they will be paid.

ASSISTANCE TO OTHER DEPARTMENTS.

DEPARTMENT OF AGRICULTURE.

The work of the Health of Animals Branch of this department in the provinces of Alberta and Saskatchewan and in the Yukon Territory, is still under our charge. Almost the entire time of Inspector Burnett, the veterinary surgeon, and 17 qualified veterinary staff-sergeants is devoted to this work, which is growing rapidly with increasing settlement. My annual report to the Veterinary Director General on this work will be found in the annual report of the Department of Agriculture.

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The veterinary staff-sergeants received an increased grant from the Honourable the Minister of Agriculture, for which they were very thankful.

The census was taken by the police in census sub-district 28. This was a very remote and sparsely settled district, and the work occupied two months.

CUSTOMS DEPARTMENT.

Our officers and non-commissioned officers stationed at Wood Mountain, Willow Creek, Pendant d'Oreille and Twin Lakes, act as collectors at these ports of entry.

Our patrols along the boundary acted as preventive officers. Several seizures were made. These patrols are not as frequent or effective as they should be owing to the lack of men, and our strength on the boundary ought to be increased. Four new boundary posts should be established. I cannot, with the present strength, arrange for these without unduly depleting the interior.

INTERIOR DEPARTMENT.

Detachments for the protection of timber were furnished during the winter months in southeastern Manitoba and the Riding, Turtle and Moose mountains.

Detachments served notices to quit on all squatters on Doukhobor lands.

INDIAN DEPARTMENT.

Escorts attended all treaty payments. Inspector West, M.D., acted as medical officer for treaty No. 8, and attended all treaty payments. Inspector West has acted for six years in that capacity and has acquired an accurate knowledge of the country and the Indians, which is invaluable to us.

Detachments have been maintained on the principal reserves for the protection of the Indian against the illicit liquor traffic. I have already mentioned the Lake Winnipeg patrol, and the assistance given the Indians on the Findlay River, B.C.

CRIME.

The conditions of the two provinces, from a police point of view, are satisfactory. There is a steady increase of crime, proportionate with the increase of population, as shown by the following tables:—

Convictions have grown from 1,250 in 1901, to 4,256 in 1906.

There are seven cases of murder entered, which require explanation; three of these were cases pending from last year, as follows:—

Rex vs. Lilge.—Jury disagreed first trial, and acquitted on second trial.

Rex vs. Brobeck.—Acquitted. (Both the above cases were simply murder for paltry gains.)

Rex vs. Lia Bing (A Chinaman).—Jury found death was caused through inadvertence, and acquitted.

There were four cases of murder entered for the current year.

Rex vs. Magyar.—Convicted and sentenced to death. Subsequently commuted to imprisonment for life.

Rex vs. Gilbert.—Shown as awaiting trial. (Convicted and sentenced to death in November.)

Rex vs. Jumbo (an Indian).—Acquitted. Jury found accused not responsible for death.

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Rex vs. Brock.—Accused found insane, and confined as such.

There were four charges of attempted murder, which resulted as follows:—

Rex vs. Rossett, convicted.

Rex vs. Webb, acquitted.

Rex vs. Urich, convicted of aggravated assault.

Rex vs. Hostetter, awaiting trial. These cases are directly attributable to drink.

The offences against women show a deplorable increase. There were four convictions for rape, and five cases are awaiting trial.

In offences against religion and morals, the increase in convictions for drunkenness is worthy of note.

Under offences against property, the cases of theft have increased.

Horse stealing furnished 31, and cattle stealing 9 convictions, and there are 27 cases awaiting trial. These offences are most prevalent in Southern Alberta, owing to the system on which the stock business is carried on. As long as stock ranges in the open prairie, the temptation to 'raise' them will be irresistible to the thief.

The offences against the Indian Act show a slight increase over last year.

There is an increase of 135 convictions under local laws. Prairie fires furnish 146, and liquor license ordinance 160 convictions.

Eighty-nine persons were committed as insane.

In the reports of officers commanding districts will be found the details of many serious crimes, for which the offenders have been brought to justice.

All ranks have shown zeal and intelligence in carrying out their police duties.

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	SASKATCHEWAN.				ALBERTA.				Total Cases Entered.
	Cases Entered.	Convictions.	Dismissed, with- drawn or Undiscovered.	Awaiting Trial.	Cases Entered.	Convictions.	Dismissed, With- drawn or Undiscovered.	Awaiting Trial.	
Offences against the public order—									
Unlawfully carrying offensive and con- cealed weapons.....	37	36	1		10	9	1		47
Pointing firearms.....	7	3	4		5	5			12
Causing explosion.....					2			2	2
Rioting.....					11	8	3		11
Offences against religion and morals—									
Vagrancy.....	151	136	15		307	296	11		458
Drunk and disorderly.....	554	545	9		313	301	12		867
Causing disturbance.....	51	50	1		37	31	6		88
Swearing, threatening and insulting language.....	13	11	2		10	9	1		23
Indecency.....	8	8			12	12			20
Gross indecency.....					2			2	7
Buggery and attempted buggery.....	4	2	2		3	2		1	1
Unnatural offence.....					1	1			1
Incest.....					1		1		1
Keeper house of ill-fame.....	5	5			13	13			18
Immoralities.....	7	7			50	46	4		57
Frequenters.....	5	2	3		24	24			29
Keeping gaming house.....	3	2	1						3
Frequenting.....	15	11	4						15
Gambling.....	5	5			1	1			6
Selling pools.....					2	1		1	2
Illegally solemnizing marriage.....	1		1						1
Adultery.....	1	1							2
Miscellaneous.....	16	11	4	1					16
Misleading justice—									
Perjury.....	6	2	3	1	5	2	3		11
Contempt of court.....					2	2			2
Corruption and disobedience—									
Escaping from custody.....	4	4			2	1		1	6
Breaking jail.....	2	2			1	1			3
Attempting to break jail.....					1	1			1
Allowing prisoner to escape from custody.....	1	1							1
Obstructing peace officer.....	11	10	1		22	19	3		33
Assaulting peace officer.....	9	8	1						9
Resisting arrest.....	8	8							8
Disobeying summons.....	1	1							1
Offences against the Railway Act—									
Stealing rides.....	21	21			9	9			30
Trespassing.....	4	4							4
Offences against the Customs Act.....									
Offences against the Indian Act—	14	13	1		5	4	1		19
Supplying liquor to Indians.....	40	37	3		71	58	13		111
Indians drunk.....	31	29	2		48	47	1		79
Drunk on reserve.....	9	7	2		50	42	8		59
Liquor in possession.....	8	5	3		8	6	2		16
on reserve.....	7	7			3	2	1		10
Taking liquor into Indian camp.....					4	4			4
Prostitution.....	3	3			1	1			4
Truant school children.....	3	3			6	6			9
Cutting and removing timber off reserve.....	1	1							1
Trespassing on reserve.....					1	1			1
Offences against the Fisheries Act.....	8	6	2		6	5	1		14
Offences against Animals Contagious Dis- eases Act.....	21	18	3		12	10	2		33
Offences against the Election Act.....	4	4							4
Offences against the Rocky Mountain Park regulations.....					26	25	1		26
Offences against Provincial statutes and the Northwest Territories' ordinances—									
Masters and servants.....	180	166	13	1	92	75	17		272
Game.....	30	28	2		31	27	4		61
Hide.....	1	1			6	5	1		7
Sunday observance.....	27	26	1		1		1		28
Prairie fire.....	96	73	23		87	73	14		183
Liquor license.....	86	79	7		94	81	12	1	180
Importing intoxicants into prohibited ter- ritory.....					4	4			4
Interdicted from use of liquor.....	9	9							

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	SASKATCHEWAN.				ALBERTA.				Total Cases Entered.
	Cases Entered.	Convictions.	Dismissed, with- drawn or undiscovered.	Awaiting Trial.	Cases Entered.	Convictions.	Dismissed, With drawn or Undiscovered.	Awaiting Trial.	
Drunk while interdicted.....	19	19			10	10			29
Supplying liquor to interdicted persons...	4	3	1		1	1			5
Insanity.....	56	*52	4		50	37	13		106
Horse-breeders.....					3	3			3
Village ordinance.....	11	9	2		12	2			13
School.....					1	1	1		2
Stock.....					10	9	1		10
Brand.....	3	3			9	6	3		12
Stray animals.....	32	31	1		39	30	9		71
Entire animals.....	1	1			1	1			2
Herd ordinance.....	5	5							5
Pound.....	24	23	1						24
Fence.....	3	3			7	6	1		10
Livery stable.....	3	2	1		3	3			6
Engineer's ordinance.....	12	12			2	1	1		14
Public works.....	8	6	2		10	10			18
Medical.....	5	5							5
Dentistry.....					1	1			1
Veterinary.....	1	1							1
Chemists and druggists.....	1	1			1	1			2
Public health.....	2	2							2
Hawkers and peddlers.....	11	10	1		8	8			19
Noxious weeds.....	6	6							6
Pollution of streams.....					1	1			1
Births and deaths.....					1	1			1
Miscellaneous.....	21	19	2		9	8	1		30
Grand total.....	2,824	2,372	405	47	2,324	1,884	371	69	5,148

* One adjudged insane. † One convicted of aggravated assault. ‡ One forfeited bail. * Sent to asylum.

COMPARATIVE STATEMENT of Convictions between Years 1900 and 1906, under General Headings.

	1906.*	1905.	1904.	1903.	1902.	1901.	1900.
Offences against—							
The person.....	590	478	386	317	189	144	109
The property.....	632	630	605	367	248	132	96
Public order.....	61	42	27	32	31	11	9
Religion and morals.....	1,533	1,379	1,312	923	494	500	350
Misleading justice.....	6	3	4	7			3
Corruption and disobedience.....	56	26	27	33	17	13	16
Railway Act.....	34	69	86	32	5	49	45
Customs Act.....	17	11				2	
Indian Act.....	259	229	228	296	238	180	143
Animals Contagious Diseases Act.....	28	24	9				
Fisheries Act.....	11	6					
Dominion Lands Act.....		2					
Election Act.....	4	2					
Rocky Mountain Park Regulations.....	25	1					
Militia Act.....			4				
N.W.T. Ordinances.....	1,000	865	777	606	298	219	165
Total.....	4,256	3,767	3,465	2,613	1,520	1,250	936

* Eleven months.

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COMMON JAILS.

We received in our eight guard-rooms in the two provinces, 1,515 prisoners, an increase of 48 over last year. At midnight of October 31 we held 137 prisoners. Our accommodation for holding this number of prisoners, is inadequate.

As I have again and again reported, common jails are required in both provinces. Our guard-rooms are overcrowded, the facilities for handling prisoners are very limited, and the sanitary conditions bad.

If the present system is to be continued, then we must double the capacity of every guard-room, and provide better facilities for the care of the prisoners.

The guard-room at Regina is specially in bad order and should be torn down.

At Calgary an improvement was made this last year by adding room for laundry and bath.

I would like to see the provincial governments relieve us of the care of prisoners. Too many men are required to carry out these duties, and they might be more advantageously employed at other work.

SCHEDULE of prisoners committed to and released from Mounted Police Guard-Rooms between December 1, 1905, and October 31, 1906.

Depôt.	Moosomin.	'A.'	'C.'	'D.'	'E.'	'F.'	'G.'	'K.'	Total.
Total number of prisoners serving sentence or awaiting trial on Nov. 30, 1905.....	19 7	8	3	17	38	.....	21	10	123
Total number of prisoners received....	278 122	66	183	223	375	.....	128	140	1,515
Total number of prisoners discharged....	276 114	63	181	219	384	.....	117	145	1,499
Died in guard-room.....	1	1	.....	.....	.....	.....	.....	.....	2
Total number of prisoners serving sentence or awaiting trial on Oct. 31, 1906.....	20 15	10	5	21	29	.....	32	5	137

STRENGTH OF THE FORCE.

The strength on October 31 was 55 officers, 549 non-commissioned officers and constables and 80 guides, interpreters, scouts, artisans and special constables. Total, 684, and 576 horses. The total strength all ranks is 129 and 30 horses less than on November 30 last year. The following is the distribution by provinces and territories:—

	Officers.	N.C. Officers, Constables and Specials.	Total.	Horses.
Alberta.....	14	213	227	261
Saskatchewan.....	25	245	270	283
Northwest Territories.....	3	27	30	.....
Yukon Territory.....	12	129	141	68
Peace-Yukon-Trail.....	1	15	16	19
	55	629	684	576

The total number in Alberta and Saskatchewan is 497, only 3 under 500, which was agreed upon as the strength to be maintained. There are 43 more in Saskatchewan than Alberta. This is due to the fact that the headquarters of the force and the training depot for recruits are in the former province.

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There are 5 divisions in Alberta, 4 in Saskatchewan, 2 in the Yukon, and 1 in the Northwest Territories. Total, 12.

There are 5 divisional headquarters and 60 detachments in Alberta; 4 divisional headquarters and 59 detachments in Saskatchewan; 1 divisional headquarters and 5 detachments in the Northwest Territories. Total (not including Yukon Territory), 10 divisional headquarters and 124 detachments.

ENGAGEMENTS AND DISCHARGES.

	N.W.T.	Yukon.
Engaged.....	58	1
Re-engaged after leaving.....	3	
Re-engaged without leaving.....	49	20
<i>Discharged.</i>		
Promoted.....	2	
Time expired (not including pensioners).....	10	13
Purchased.....	31	33
Invalided.....	10	1
Pensioned.....	6	
Died.....	5	1
Deserted.....	19	3
Dismissed for bad conduct.....	24	10
Dismissed as inefficient.....	3	
Specials discharged.....	60	63
Specials engaged.....	57	45

I regret that 34 members of the force had to be dismissed for bad conduct. Drunkenness was the cause in nearly all cases. Most of these were intelligent, well educated young men, and it is sad that so many should have come to grief.

Sixty-four men purchased their discharge for the purpose of bettering their positions, there being no difficulty in the west at the present time for any steady, intelligent man to secure lucrative employment.

There was a marked falling off in the number of applicants for engagement. No special effort was made to recruit.

TRAINING.

The training of the recruits has been carried out at the depot as systematically as possible, but it is subject to too many interruptions, as the recruits have to be employed on urgent duties. Our limited strength does not permit any reserve of trained men, in fact, recruits are drafted out to other districts before they have completed their training, which is unsatisfactory, and cannot but affect the efficiency of the corps. However, as long as our strength remains stationary, and the demands for our services increase, the undesirable practise must continue.

A class for the qualification of 16 constables for promotion to the rank of non-commissioned officers, was assembled at Regina for three months. The course was a difficult one and I was much pleased with the proficiency attained by all. They were an exceptionally smart lot.

The annual training of the divisions is becoming less and less each year, because the time cannot be found for it, their strength is so widely distributed, and so few are stationed at any post.

The thorough training of recruits is, therefore, the more necessary.

ARMS—TARGET PRACTICE.

Some serious defects were found in the Ross rifle with which the force were armed last year, when it was put to the severe test of the annual target practice. As

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soon as these were discovered the practice was suspended as it was thought some serious accident might happen. This rifle is still in the hands of the men.

The Colt revolver, which was issued at the same time, has proved to be an admirable weapon. The improvement in revolver shooting was most marked, although the new regulations adopted recently were more difficult and called for greater skill.

Seventy-four men qualified for cross revolver badges.

SADDLERY AND HARNESS.

Some improvements in the saddle are being considered which will lessen the weight considerably without interfering with the strength and durability of the tree, which is its strong feature. I propose asking your authority for the purchase of a small number of the improved pattern, so that it may be thoroughly tested before adoption.

Several sets of harness will be required to replace those worn out and condemned.

TRANSPORT.

Our transport is in good order and repair. Several vehicles have been condemned and require to be replaced.

UNIFORM.

The supply of uniform has been of good quality.

RATIONS.

All provisions are purchased under contract and are reported of good quality and in accordance with the contracts, with the exception of jam, which has given rise to many complaints.

FORAGE.

Our system of purchase is to call for tenders locally, and award the contracts to the lowest tenderers. The competition is not keen, because of high prices now prevailing, and the ready markets. Often no tenders are received. Tenders are always refused if the prices are above the market after making due allowance for the onerous conditions of delivery, quality and inspection.

HORSES.

Sixty-one remounts were purchased at an average price of \$112.87 per head. They are a useful lot but I find it more difficult every year to secure the stamp of horse required. Inspector Burnett, veterinary surgeon, recommends the establishment of a breeding farm. I am more inclined to a recommendation I made some years ago, that the government purchase thoroughbred stallions, and station them at suitable points in the west, reserving the option of purchasing the colts at three years of age.

Our horses have had very heavy work, and several have broken down under the strain. One horse per man, on detachment work, is not sufficient. Our strength in horses should be increased.

Our total loss was 61, as follows:—

Cast and sold.....	20
Destroyed.....	21
Died.....	20
Total.....	61

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The average price realized from horses cast and sold, was \$46.85.

Eighteen horses were destroyed on account of glanders; twelve at Battleford, five in the Yorkton district, and one at Regina. The origin of the disease at Battleford could not be discovered; in Yorkton district it originated in a livery stable; the single case in Regina was a ceased re-actor to the mallein test.

We are always liable to an outbreak of glanders, as our horses are necessarily placed in all sorts of stables.

Two of the remaining three were destroyed on account of fractures, and one for sub acute laminitis.

Thirteen horses died on the Peace Yukon trail from exposure, hardship and over-work. Considering the nature of the work, this loss was unavoidable.

Four were accidentally killed, one was avoidable, and the value of the animal was recovered from the person responsible.

One, died from blood poisoning, one aneurism and one internal hemorrhage.

DEATHS.

It is with great regret I have to record the death of six members of the force during the year.

Inspector McGinnis, T., died March 4, 1906.

Reg. No. 869 Staff-Sgt. Hayne, M.H.E., died April 18, 1906.

Reg. No. 3465 Sergt. Skinner, R.H., died June 16, 1906.

Reg. No. 2372, Corporal Kembry, S.J., died April 5, 1906.

Reg. No 4119, Const. Jackson, P.R., died June 8 1906.

Reg. No 2836, Corpl. Haddock, A.G., died June 14. 1906.

Inspector McGinnis never recovered his health, which was much impaired by a hard journey he made into the interior of Keewatin last year. He served twenty-four years in the force and was a most reliable and efficient officer.

Staff-sergeant Hayne died at Fullerton, Hudson bay, on April 18, 1906, but his death was not known here until October. Promoted to the rank of inspector on August 1, 1906, he never knew that his long and faithful service had been recognized. As one of our pioneers, it is perhaps fitting that he should find his grave in that lonely north land.

The loss of the other non-commissioned officers and men, was much deplored by their comrades.

GENERAL.

On July 1, Inspector W. H. Irwin retired on pension, after completing twenty-seven years valuable service. He carried with him the best wishes of all ranks.

On closing my report, I have to acknowledge the hearty and loyal support which I have received from all ranks. I am fortunate in having an efficient staff, devoted to their duties, and district commanding officers who most efficiently and zealously carry out their important duties.

I have the honour to be, sir,

Your obedient servant,

A. B. PERRY.

Commissioner.

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APPENDIX A.

ANNUAL REPORT OF SUPERINTENDENT R. B. DEANE, COMMANDING
'E' DIVISION, CALGARY.

CALGARY, November 1, 1906.

The Commissioner,
R.N.W. Mounted Police,
Regina, Sask.

SIR.—I have the honour to render the annual report of 'E' division for the year ended October 31, 1906.

Having been transferred from Maple Creek to Calgary, I arrived here on Sunday August 5, and assumed command of the division on the Tuesday following.

It happens that my visits to Calgary during my twenty-three years service in the Northwest have been short, few, and far between, and I have thus not had much opportunity of acquiring the personal knowledge of my district which is essential to efficient administration, and which I hope to acquire in the not-distant future. All ranks have been busily employed since my advent and, of the heavy criminal docket to be brought before the Supreme Court at the assizes on November 6, not a few cases have originated since that time.

GENERAL STATE OF THE DISTRICT.

Since last year's report, wherein the limits of the Calgary district were defined, the area covered by 'E' division has been extended easterly as far as the fourth principal meridian, enlarging the district in question by about 8,640 square miles. This has necessitated rearrangement of sundry detachments, while the strength of the division in men and horses remains pretty much as it was before.

According to the recent census there are three places within the Calgary district with a population of more than 1,000 souls, viz.: Calgary, 14,203; Red Deer, 1,418; and High River, 1,018, but at the present rate of progression there will ere long be many other municipalities that will have attained their majority.

Without specifying in detail such works as a large addition to the Calgary brewery, cement works, iron foundry, box factory, soap factory and three large flour mills, I find that within the city limits the estimated value of buildings for which permits have been issued since January 1 last, amounted to the respectable total of \$890,196.

Prince Arthur of Connaught visited Calgary on April 5 last, and a travelling escort was furnished during his stay here, and during his visit to the Blackfoot Indian reserve, where an escort from 'D' division met and accompanied him thereafter.

The Governor General and suite arrived here from the north on September 3 and visited the exhibition grounds where the athletic sports of the Trades and Labour Union were taking place, and where they were welcomed by one of the worst dust storms which it has been my fortune to experience. They left for British Columbia via the Crow's Nest road on the following morning, returning eastwards on October 10.

THE RAILWAY HOLD-UP.

It has for years been an open secret that the train robbing fraternity in the United States had seriously considered the propriety of trying conclusions with the mounted

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police, but had decided that the risks were too great and that the game was not worth the candle.

After the object lesson that they received last May, it may be reasonably hoped that railway passengers will be spared further anxiety during the life of the present generation at least.

In furtherance of a telegram from yourself at Macleod on May 11 last, the following party, which included yourself, left on the belated westbound train No. 1 for Kamloops, British Columbia:—

Sergeants Wilson and Thomas, Corporals Peters and Stewart and Constable Tabuteau. Constable Browning joined the party at Morley and Sergeant Shoebottom at Banff.

Inspector Church arrived from Regina on May 12 and left Calgary with ten men on the 13th en route to Vernon.

The following is a copy of Sergeant Wilson's report as to what his party did:—

CALGARY, May 19, 1906.

According to instructions I left Calgary on the afternoon of May 11 with Sergeant Thomas, Corporals Stewart, Peters and Constable Tabuteau, picking up Constable Browning and Sergeant Shoebottom at Morley and Banff. We arrived at Kamloops about 3 p.m., of the 12th, and having our own saddles and bridles, we were supplied with local horses, two of which were old and broken up, the rest were almost unbroken bronchos and only the coolness and careful handling by the men prevented some serious accidents.

We left Kamloops at 6 p.m., patrolling south, arriving at a ranch about twenty miles out at 12.30. Our horses were played out, the night dark and wet. It was impossible to go further so we camped for the night with a rancher named Blackburn.

At daylight of the 13th, I tried to get a fresh horse for Sergeant Shoebottom, whose horse was very much played out the night before, but was unable to do so. We therefore had to travel slowly at first. We travelled across country towards Douglas lake, making inquiries at every ranch and every person we saw. We fed the horses every chance we got and this seemed to freshen the horse ridden by Sergeant Shoebottom and we began to make better time. We arrived at Douglas lake about 5 p.m. of Sunday the 13th, and after making inquiries there, I concluded that the only likely place for the robbers to be was between Chapperon lake, Salmon lake and Campbell meadows (where the men were last seen).

I obtained a pack outfit from Mr. Greaves, manager of the Douglas lake ranch. Sent telephone message to the Commissioner to this effect but subsequently learned message was not received by him.

At daylight on morning of 14th, we patrolled to Chapperon lake, where I intended to start for Campbell meadows. Just after having lunch, Provincial Constable Fernie rode up and said he had seen three men on foot with packs on their backs, whose description agreed with that of the train robbers. He could not describe where he had seen them but could take us there. My party immediately galloped off, making the 7 miles in about 20 minutes. Fernie showed us where he had seen the men but we could find no tracks, and he could not tell which way they were going when he saw them last.

I obtained the assistance of an Indian tracker. Constable Browning saw some tracks on the trail going towards Quilchena, but the Indian concluded they were Chinaman's tracks.

I then sent Sergeant Thomas up a mountain to see if he could observe anything from there. Constable Tabuteau with the guide Jim Benyon and the Indian I sent back to where the robbers came from to try and get track of them. Provincial Constable Fernie in the meantime had gone on to Douglas lake. The rest of my party scattered out to patrol towards Quilchena.

After going about a mile and a half, Corporal Stewart, who was to the left of the patrol and a little ahead, waved his hat. Sergeant Shoebottom and myself with Cor-

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poral Peters and Constable Browning, immediately galloped towards Corporal Stewart, where he had seen smoke in the brush.

We all dismounted, leaving the horses standing, went into the brush and found three men eating dinner. I asked them where they came from. The eldest man, who afterwards gave the name of Edwards, said 'Across the river.' I asked them where they were before that. Edwards said 'From over there' (pointing towards Campbell meadows). I asked how long since they had left there. Edwards said 'Two days.' I then asked them what they were doing. The one who afterwards gave the name of Dunn, answered, 'Prospecting a little.' I then said, 'You answer the description given of the train robbers and we arrest you for that crime.' Edwards said, 'We do not look much like train robbers.' Just then Dunn rolled over and said, 'Look out boys, it is all up,' and commenced to fire his revolver. I immediately covered Edwards. Corporal Peters was standing close to Colquhoun, who was reaching for his revolver, and he covered him and ordered him to put up his hands, at the same time snatching away Colquhoun's revolver. Sergeant Shoebottom, Corporal Stewart and Constable Browning ran after Dunn, firing as they went, he returning the fire as he ran. After some twenty shots had been exchanged Dunn fell into a ditch and threw up his hands, saying, 'I am shot.' The men ceased firing and took two revolvers from Dunn. On taking him out of the ditch it was found he had been shot in the calf of the leg, the bullet going right through. I told him he had done a foolish thing as he might have got shot in the head instead of the leg. He said, 'I wish to — you had put it through my head, but you couldn't blame me, could you?' I then had Dunn's leg bandaged up and sent a messenger to get a rig to convey the prisoners to jail. I also sent the guide Benyon to Quilchena to get the Commissioner on the telephone and tell him all the particulars. This message I subsequently learned was taken by Supt. Hussey of the provincial police in Commissioner Perry's name. I also sent word by Benyon to send a doctor out to meet us, as I did not know how much of Dunn's drawers might be left in the wound.

The prisoners were then searched, and the hands of Edwards and Colquhoun bound. Three automatic revolvers, one 44 Colt's (six chamber), one Ivor Johnson 38, one Smith & Wesson 38, and one Winchester carbine 44, were found in their effects.

The goggles worn by Edwards were found in his coat pocket. A small bottle of catarrh cure, which was supposed to have been taken from the mail car, was found among their effects. Very little money was found on them. Edwards had one ten dollar gold piece, one five dollar bill, one ten dollar bill and two fifty cent pieces. The other two prisoners only had some small silver on them.

A team having arrived, the prisoners were conveyed to Douglas Lake ranch, where I had Dunn's leg washed, camphor ice put on and bandaged up. We then fed the horses and obtained lunch from Mr. Greaves, also a team and light democrat. Left about 5 p.m., for Quilchena, meeting Dr. Tuthill about four miles out of Quilchena. After a short consultation with the doctor and prisoner Dunn, we concluded to go on to Quilchena before doing anything to the leg. After arriving at Quilchena the doctor dressed the wound, first probing and finding no bones broken, the bullet passing though the fleshy part of the right leg. A message by this time had come to me supposedly from Commissioner Perry to hold the men till he came out to Quilchena, where he would be at daylight. The message was afterwards changed. It was Superintendent Hussey who was coming out. I then tried to get the Commissioner on the telephone but was unable to do so.

I then detailed a night guard of two men over the prisoners, the rest of the men sleeping in the same building. At daylight on the 15th, I made ready to start to Kamloops, a distance of fifty miles. At Rockford, fifteen miles from Quilchena, I met Superintendent Hussey, who wanted to take the prisoners away from us. He did not succeed, however, and we arrived at Kamloops about 5 p.m., in a pouring rain, and delivered the prisoners and their effects over to the provincial jail.

On the 16th instant, the prisoners were remanded till 10 a.m., of the 17th. On

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the 17th, Sergeants Wilson and Shoebottom, Corporals Stewart and Peters and Constable Browning gave evidence, and at 6 a.m., of the 18th, Sergeant Wilson and party left for Calgary arriving here at 1.30 p.m. In conclusion I wish respectfully to draw your attention to the good work done by every member of my party, work done for the most part in a pouring rain and darkness. The distance covered was about 185 miles in three days and nights. I would especially draw your attention to the work of Sergeant Shoebottom, Corporals Stewart and Peters and Constable Browning. Their coolness and courage under fire from an automatic revolver I think, could not be surpassed.

I would also draw your attention to the kind assistance received by us from Mr. J. B. Greaves, manager of the Douglas Lake ranch who told us to go to any of his camps, of which there are several, and get anything we wanted. It is such assistance that makes arduous police duty lighter.

The man Dunn told me before leaving to tell all members of the Northwest Mounted Police, that he had no grievance against any of them, they had done their duty well and he was thankful for the kind attention which he received after being wounded, and he said, you may think it funny coming from me, but I certainly admire the way you boys do your work.

On the train coming home I met a man named C. J. Hawes, who recognized Colquhoun from a photograph we had, and said he went to college with him. Hawes thought he might be able to do something with Colquhoun as to getting the truth out of him, so I gave him a note to Mr. Clauss, who is acting with the attorney general.

Edwards has been positively identified by Mail Clerk McQuarrie as one of the men who held him up. He has also been recognized as Bill Miner, who is supposed to have had a hand in the Mission Junction hold-up. He is also wanted badly in several places in the United States.

(Sgd.) J. J. WILSON, *Sgt.*

On May 28, the three prisoners were tried at Kamloops and the jury disagreed.

A new one was impanelled on the morning of May 31, and the hearing was completed on Friday night June 1.

The jury now found all the prisoners guilty and they were sentenced to the following terms of imprisonment, viz.:—

Edwards for life; Dunn for life; Colquhoun for twenty-five years.

The members of the mounted police concerned as witnesses arrived at Calgary on June 2.

THEFT OF A REGISTERED PACKAGE CONTAINING \$2,000 BETWEEN CALGARY AND EDMONTON.

About two hours after Sergeant Wilson's arrival in Calgary from Kamloops as previously described, he was detailed to shadow one D'Armour, a mail clerk, who was suspected of having stolen a package of ten dollar Union Bank bills.

As this was a 'G' division case, it is not necessary for me to do more than briefly describe Sergeant Wilson's participation therein.

D'Armour left Calgary on June 3 for Winnipeg, whither he was accompanied by Sergeant Wilson. Some \$860 of the stolen money was in a trunk which D'Armour had despatched by express to Winnipeg and there Sergeant Wilson found it. The money was pushed into the toe of a boot.

This case is still awaiting trial at Edmonton.

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CRIME.

The following is a tabulated statement of cases entered and disposed of during the preceding eleven months:—

	Cases Entered.	Con- victions.	Dis- missals.	With- drawn.	For- feited Bail.	For Trial.
Offences against the person—						
Attempting suicide.....	2	1	1			
Attempting rape.....	2					1
Wounding.....	3					
Pointing firearms.....	3	3				
Intimidation.....	5	2	3			
Assault, common.....	70	52	15	2		1
" indecent.....	1		1			
Contempt of court.....	2	2				
Perjury.....	1	1				
Murder.....	1		1			
Offences against property—						
Cattle stealing.....	4		2			2
Horse stealing.....	16	3	7			6
Theft.....	58	40	9	2	1	6
Housebreaking.....	4	2				2
Burglary.....	7		1			
False pretenses.....	2		6			1
Forgery.....	2					1
Cruelty to animals.....	16	11	2			
Injuries to animals.....	1	1				
Mischief.....	13	6	7			
Killing and wounding cattle.....	1	1				
Receiving stolen property.....	1	1				
Leaving well unguarded.....	2	1	1			
Forcible entry.....	3	3				
Attempt to break prison.....	1	1				
Nuisance.....	4	4				
Breaking jail.....	1	1				
Offences against public order—						
Carrying concealed weapons.....	2	2				
Obstructing police.....	4	4				
Offences against religion and morals—						
Vagrancy.....	248	243	5			
Keeper, house of ill-fame.....	3	3				
Inmate.....	12	12				
Frequenting house of illfame.....	14	14				
Offences against Indian Act.—						
Indians drunk.....	27	26	1			
Supplying liquor to Indians.....	10	8	2			
Taking liquor into Indian camp.....	4	4				
Drunk on reserve.....	2	2				
Prostitution of Indians.....	1	1				
Truant school children.....	2	2				
Offences against Railway Act—						
Stealing rides.....	5	5				
Offences against N. W. Ordinances—						
Prairie fires.....	50	43	7			
Liquor license.....	17	13	3	1		
Stock.....	3	3				
Game.....	10	6				
Insanity.....	12	10	1	1		
Master and servants.....	30	29		1		
Public works.....	4	4				
Estray animals.....	25	22	3			
Brand.....	7	6	3			
Protection of animals.....	7	6	1			
School.....	1	1				
Hawkers and pedlars.....	1	1				
Village.....	1					
Lord's day.....	1		1			
Pollution of streams.....	1	1				
Births, &c., and deaths.....	1	1				
Miscellaneous.....	1	1				
Animal contagious diseases.....	6	4	2			
Rocky Mountains Park Regulations.....	26	25	1			
Totals.....	761	641	90	7	1	22

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The following statement shows the number of convictions, number of fines imposed, number of sentences to jail, suspended sentences and number sent to penitentiary:—

Number of Convictions.	Number of Fines imposed.	Number of Sentences to jail.	Suspended Sentences.	Number sent to Penitentiary.
641	441	156	36	10

It must not be expected that 156, the number of sentences to jail, will agree with the prison records, because the prison received inmates from other districts in Alberta. This number includes lunatics.

There is one case of indecent assault, the circumstances of which seem to argue unusual depravity in the family in which it occurred. The assaulted girl is of tender age, and the offence in question took place in the presence of her two sisters. The evidence for the prosecution is quite complete, but the accused is in the United States. I believe that he can be found without difficulty, but as the mother of the assaulted girl is his sister it would be quite possible to obstruct the production of the necessary evidence in a United States extradition court.

Affray at Cochrane.—Two Italians, workmen on the Canadian Pacific Railway, stand committed for trial for wounding at Cochrane on the evening of September 29 last.

On telegraphic report of a disturbance there four constables, by the kindly co-operation of Mr. Niblock, went from here by hand car, and, as it seemed rather more than probable that a charge of murder might arise, I despatched Inspector Duffus to take if necessary an ante mortem declaration from the wounded men; with him went Staff-Sergeant Wilson. The affray was brought on by the rowdiness of one of the two wounded men, who was the same night brought to the general hospital here with no less than seven wounds. A broken knife blade about two inches long was taken out of one wound in the back near the spine, and his condition was for a time very critical. The general consensus of opinion was that he had himself to thank for his trouble, whereas the other victim was an inoffensive rancher who was going about his business, saying nothing to anybody, and who received a deep and dangerous wound in the region of the liver. Fortunately he pulled through, but will not be fit for work this year. Some of the people of Cochrane were so incensed at the conduct of the Italians, some fifteen or sixteen in number, who, failing pistols, carried knives, that if they could have obtained firearms in sufficient quantity there would probably have been considerable blood shed. Happily better counsels prevailed, and the Supreme Court will deal with the matter next month.

A large number of assault cases have been taken into court, but there was only one sufficiently serious to send for trial to the assizes.

Horse stealing.—Seventeen cases of horse stealing have been entered, and of these six will be tried at the next assizes.

A young man giving the name of William Finch went to a livery stable in Calgary and hired a saddle horse for two days to go and see a friend some fifteen miles south-east of Shepard. He was entirely unknown at the stable, but was allowed to take the horse. He rode to Okotoks, and under the name of Frank E. Harlem, of Stettler, on the same day sold the horse, saddle and bridle to a farmer there for \$75. He then took the train to the south and we have so far been unable to trace him.

One young man, a recent immigrant from the United States, was furnished by his aged parents with about \$500 and sent into Alberta to make a home for them. He went through the form of taking up a homestead near Innisfail, and apparently squandered the money, for there is no evidence of it. Furthermore, he appears to have fallen into

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bad company, for he stole six horses in the south and carried them off to the neighbourhood of his place in the north, and having picked up a \$200 colt on the prairie in the north he brought her southwards and sold her for \$75. On these charges he will stand his trial next month.

There is nothing about the other cases that calls for comment.

Last September we investigated a very circumstantial complaint from a distance that a bunch of horses had been mysteriously moved by night from one part of the country to another, with the result that we found that a certain ranch had sent some horses to Medicine Hat for inspection by the British remount officers; that only four out of fifty had been by them accepted and the remainder were driven home again. As night had overtaken them when they reached a specified river, they crossed the river in the dark and continued on their homeward way, little dreaming of the suspicions they were arousing.

Another bubble recently blew itself up to bursting point and then collapsed in connection with a shipment of beef cattle to Calgary. On arrival here it was found by the chief brand inspector that in a shipment of 21 head the brands on 14 animals did not correspond with the inspection certificate at the other end. We gave the case the investigations it demanded and found that the shipper, having recently come from Ontario, is entirely new to brands and their uses. When he bought the cattle from their respective vendors he inquired the brands and made a note of them. He passed the note to the brand inspector who copied the brands into his certificate without taking the trouble to verify them, and that is all there was in it. The system, however, is hardly that which the Legislature had in mind when passing the Stock Inspection Ordinance.

Out of 55 cases of petty theft, 40 convictions have been obtained, while 6 are awaiting trial in the Supreme Court, nine having been dismissed, two withdrawn and one has lapsed by forfeiture of bail on the part of the accused.

In the false pretences class one of the accused who victimized his friend, a young bank clerk, obtained \$300 and went into the United States. He could not be extradited without the evidence of his father who very wisely declines to commit himself and who could not furthermore be compelled to attend a United States Commissioner's Court against his will.

The detachments have been busy in the case of prairie fires, as 43 convictions out of 50 charges sufficiently show. Special attention has been paid to seeing that the precautions laid down in the ordinance are duly observed. Some of the convictions under this head are for neglect of those precautions.

Corporal Tucker of Carbon detachment has shown great energy in this direction, also in connection with 'The Estray Animals Ordinance.' The taking of stray animals off the range and riding or working them is far too common, and several of the convictions shown apply to that class of offence.

In connection with game, I believe most sportsmen will agree with me in saying that if the killing of prairie chicken is not absolutely prohibited for a given term, there will soon be very few to kill.

As for the big and other game in the National Park, competent observers say that the stock is becoming less and less every year. Considerable attention has been devoted to it during the past year, and investigation has shown that it is impossible to enforce the regulations so long as the issue of shooting permits is allowed to continue. A regulation to the effect that it is an offence to carry a gun within the park limits, would do more to protect the game therein than anything else. I am also not alone in the belief that the forfeiture of any gun so found in the park would be of material assistance.

PRAIRIE FIRES.

On the 14th March a prairie fire was observed near the mouth of High river and started in a pasture wherein some stock were feeding. Two riders and two Indian boys

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had been seen in the pasture but each party blamed the other for the mischief and the originator could not be traced. About 500 acres were burnt over before neighbours got the fire under control.

On the 26th April a fire which burnt a stable, granary, tanning mill, 1,200 bushels of oats and about 100 tons of hay, was started about 5 miles southwest of High river by a young man, a stranger in the neighbourhood, who carelessly dropped a match. When he saw what he had done he incontinently left by the first train.

The records show that on the 25th April a fire which was estimated to have caused some \$1,000 worth of damage, was started east of Okotoks by sparks from the chimney of a house. The fire burnt over a strip of country 14 miles long by about 4 miles wide, and the owner of the chimney was fined \$50 by the local justices.

April was a bad month for fires, for, on the 27th thereof, to the southeast of Carstairs, a fire started which burnt over a stretch of country about 10 miles long by 2 wide. The accused himself said that a spark from his chimney set it going. His counsel attributed the disaster to 'an act of God' and the local magistrate apparently took that view of it.

On the 17th April a fire started some 20 miles west of Okotoks and burnt over about 9 miles of grass and destroyed 150 tons of hay. How it was started is not recorded, but the originator presented himself before the local J.P., and was fined \$25 and costs.

A disastrous fire was caused to the west of Airdrie on the 16th April by some men who were clearing land for the plough without having taken the proper precautions. Several settlers sustained heavy losses and one was burnt out completely. The accused was fined \$25.

The Didsbury district was similarly visited on the 17th April, and a large quantity of hay, out-buildings, machinery and some cattle were destroyed. A fine of \$25 was imposed upon the originator.

As the criminal records shows, careful investigation have been made in every case as to the origin of a fire and the offenders have for the most part been convicted.

Generally speaking the autumn months have been refreshingly free from devastation by the fiery element.

ASSISTANCE TO OTHER DEPARTMENTS.

JUSTICE.

Guard-Room and Comon Jail.

The guard room here is under the capable supervision of Corporal Stewart, and as it has been the custom for him to write his own report, I subjoin it accordingly.

The matron of the female prison, who has been recently appointed, has had over twenty years experience as nurse, and any prisoners who happen to become sick, are placed under her care:—

CALGARY, November 1, 1906.

To the Officer Commanding,

R. N. W. M. Police,

Calgary, Alta.

SIR,—I have the honour to submit the annual report of 'E' Division guard-room for the term ending October 31, 1906.

Thirty-eight prisoners were confined in the guard-room at the beginning of December, 1905. The total number confined during the year was 413, classified as follows:—

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Males.		Females.	
Whites..	248	Whites..	15
Half-breeds..	31	Half-breeds..	20
Indians..	27	Indians..	12
Lunatics..	29	Lunatics..	7
Negroes..	8	Indian girl..	1
Chinamen..	3		
Boys..	12		
Total..	358	Total..	55

The daily average was thirty-four. The monthly average was thirty-four. The maximum 53 (September), the minimum sixteen (February).

Of the male prisoners, ten were transferred to the Manitoba penitentiary, all from this district, with an average sentence of 3:07 years; nineteen were wanted at other places, nine by the city police, one by the United States authorities at Philadelphia, one by the British Columbia police, and twelve at other divisions of the Royal Northwest Mounted Police. Twelve prisoners are awaiting trial and have been confined for an average period of sixty-one days, one, Roy Spencer, was extradited from the United States; twenty-seven were released on bail, one was pardoned after serving nine months of a twelve months sentence; sixteen arrested for various crimes and their cases dismissed; six cases were withdrawn; seven sentenced prisoners from other guard-rooms were confined while en route to Edmonton penitentiary; one, Genoski, sentenced to three years in Manitoba penitentiary escaped on March 4, 1906, by climbing out from the jail yard where he had been locked out; one, Peterson, sentenced to six years Stony Mountain penitentiary for burglary, attempted to escape by cutting through the roof of his cell but was discovered by the night guard, he was subsequently tried by Mr. Justice Harvey and sentenced to one year's additional hard labour; twelve sentences were inflicted on boys under sixteen years; one, Percy Dyson, after serving a sentence for theft was sent to Battleford where he had broken jail some time before; one negro gave himself up at the guard-room as a vagrant as he was sick and destitute; one was fined for keeping a stray horse; one for selling liquor without a license; eleven Indian boys deserted from industrial school were returned to the school authorities; fifty were fined for minor offences; twenty-nine lunatics were handled, seventeen taken to Brandon asylum, eight discharged in care of friends, three discharged as cured and one who was not dangerous as the attorney general did not consider he should be a public charge.

Of the female prisoners, seventeen came from other divisions to be imprisoned here; one after awaiting trial twenty-five days was released by order of the judge on account of sickness, one for attempted suicide was released on suspended sentence, four released on bail, one released with a caution, one case withdrawn. Nine female prisoners were fined and thirty were imprisoned for different crimes and offences, seven were lunatics, one girl deserter from Indian industrial school.

The health of the prisoners has been very good, there having been only two cases of any consequence. One a case of diphtheria contracted by a boy prisoner four days after his imprisonment, the other was a prisoner sentenced to three months for vagrancy, received in the guard-room with both feet badly frozen and it was found necessary to amputate two of his toes.

The conduct of the prisoners has been very good, a few punishments have been inflicted for breaches of discipline, but the percentage was small in comparison with the number of prisoners confined.

The buildings are in good repair, an addition comprising a bath-room, a tool-room and laundry having been built on to the east wing of the guard-room. A sewer over 700 feet long has also been installed doing away with the closet and slop barrels in the jail yard. A number of other improvements have also been made during the year costing in all, \$1,000.

The accommodation in the guard-room is inadequate, there being only twenty-two cells in the building and sometimes thirty-five prisoners, necessitating the doubl-

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ing up of a great number of prisoners, which is not at all satisfactory, both in regard to safety and health.

A sufficient amount of clothing has been placed at my disposal during the past year. A prison uniform has been provided for prisoners serving long terms, which makes a man more conspicuous should he attempt to escape.

As there is no accommodation for juvenile offenders, they are confined in the female jail where they are less liable to be contaminated than if confined in the male guard-room.

Twenty-nine prisoners are confined in the guard-room at present classed as follows:—eighteen undergoing sentence, eleven awaiting trial.

Three hundred and seventy-five prisoners were admitted, 384 discharged during the past year.

Attached is a statement of prisoners who have undergone or are now undergoing sentence.

I have the honour to be, sir,

Your obedient servant,

J. C. STEWART Coroner.

Provost.

Charges.	Sentences.	Average terms.		Remarks.
		Months.	Days.	
Males—				
Assault.....	12	2	23½	1 went insane and was taken to Brandon.
Cruelty to animals.....	1		14	1 bound over to keep the peace six months.
Burglary.....	1	6		
Drunk, &c.....	38	1	8	
Forgery.....	1	6		
False pretenses.....	3	4	8	
Stealing ride on C. P. R.....	6		9½	
Theft.....	30	2	27½	1 pardoned after serving 9 months.
Vagrancy.....	34	1	6½	1 sentenced from Macleod.
Breaking jail.....	1	12		
Horse-stealing.....	5	7	20½	2 one-year sentences.
Carrying concealed weapons.....	1		10	
Females—				
Assault.....	1	1		
Prostitution.....	1	6		
Drunk.....	6	2	4½	
Vagrancy.....	6	1	25	
Theft.....	1	6		
Attempted suicide.....	1			
Boys—				
Assault.....	1		1	
Theft.....	9	1	12½	
<i>Indian Act.</i>				
Males—				
Supplying liquor to Indians.....	3	3		
Having liquor in possession.....	2	4	15	
Having liquor on reserve.....	1	3		
Drunk.....	6	1	15½	
Females—				
Supplying liquor to Indians.....	5	3	27½	1 three-months sentence concurrently.
Drunk.....	9	1	1½	1 released on bail pending appeal.

NOTE.—The above statement does not include a number who have had options of fines, which have subsequently been paid.

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DEPARTMENT OF AGRICULTURE.

There is still considerable mange in the country and we are constantly coming across cases here and there.

We are now, since Dr. McKay's arrival, able to deal systematically with these and to take in hand every case that comes to our knowledge.

Dipping is fairly general. The big stockmen can be trusted to know where their interests lie, and it is as a rule only the small stock owners who give any trouble. Mr. George Lane has now imported a spraying machine which is said to afford incomparably more efficacious treatment than any other system.

CUSTOMS DEPARTMENT.

There has been no call for assistance during my tenure of office here.

PROVINCIAL GOVERNMENT.

I submit that the criminal record is evidence that we do not overlook the application of any provincial ordinance nor neglect the interests of the province at large.

STATE OF THE INDIANS.

One hears very little of the Blackfeet, which is a good sign, indicative of prosperity and contentment.

The Sarcees drink more than is good for them, and we are rather at a disadvantage in not having an interpreter. A competent man could look after them more than we are able to do now. Indeed we are dependent upon a prisoner for our interpreter.

The Stony Indians will effectually prevent the big game in the mountains from becoming too numerous, and they are not likely to discriminate too nicely as to the denizens of the National Park.

There is one case wherein, as I have elsewhere indicated, a provision in the Rocky mountain regulations forbidding the carrying of a gun within the park would come in useful.

DISTRIBUTION OF STRENGTH.

The following is the distribution state of the division on October 31, 1906 :—

Station.	Superintendent.	In-spectors.	Staff-sergeants.	Sergeants.	Corporals.	Constables.	Special Consts.	Total.	Horses.
Calgary.....	1	1	3	1	2	14	4	26	17
Gleichen.....			1			1	1	3	4
Berry Creek.....					1	1		2	4
Carbon.....					1	2		3	5
Olds.....					1	1		1	2
Instail.....					1			1	1
Red Deer.....						1		1	1
Lacombe.....						1		1	1
Banff.....					1	1		2	3
Bankhead.....						1		1	1
Canmore.....						1		1	1
Morley.....						1		1	2
Okotoks.....				1				1	1
High River.....						1		1	1
On command.....				1				1	
Totals.....	1	1	4	3	6	26	5	46	44

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Corporal Peters, of Berry Creek detachment, thinks that he should have two men with him instead of one in consequence of the long and sometimes obscure trails in his subdistrict, and I think so too, but I have not yet decided that I can spare one.

Corporal Tucker wrote amusingly the other day : 'Here have I got sixteen convictions in fifteen days and I could do better still if I had more help.' I sympathized and condoled, but said he might as well ask for a piece of the moon. I pacified him for the time being with an extra horse. He has two men with him, but a large district that requires watching.

DRILL AND TRAINING, MUSKETRY, ARMS, ETC.

There was a little drill here in the spring prior to the visit of Prince Arthur of Connaught, but none since my advent. When the Governor General was here last I was asked what the police could do. I replied: 'I have five men for duty to-day and one of them is going to Brandon with a lunatic to-night. That will leave four with about thirty prisoners. If you take two constables away I shall have to keep about fifteen prisoners locked up.' The conversation then changed.

The target practice with the Ross rifle was not completed this year, but the shooting with the new Colt's revolver was astonishingly good. We require six more Colt's revolvers to complete the equipment of the division.

HEALTH.

Sergeant Hetherington has unfortunately been troubled with his hip which necessitated some months leave on the coast, but he is able to do his ordinary work now although he limps a little.

Constable Graham acquired an attack of typhoid fever at Gleichen ; came into the general hospital here for treatment for a time, and thereafter developed another attack from which he is now convalescing.

The health generally has been good.

HORSES.

Four team and eight saddle horses have been purchased during the year. One has been cast and sold and one destroyed on account of a hind leg broken by a kick from another horse. The horses, generally speaking, are in good condition.

TRANSPORT, HARNESS AND SADDLERY.

The transport is in fairly good order. There is no double buckboard here and one is very much required, in the absence of such a vehicle it is sometimes necessary to use a spring wagon for a purpose for which it was not built and its life is thereby shortened. The spring wagon at Banff requires a new set of wheels and axles.

The harness and saddlery are in good order, and are sufficient for our present use.

CANTEEN.

The canteen is prosperous and contributes very materially to the well-being of the men.

READING AND RECREATION-ROOM.

The reading-room here is the best equipped that I have seen in the force, and the billiard table is a great boon.

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BARRACK BUILDINGS.

The new quarters for the officer commanding are well on their way to completion and should be ready for occupation by December 1. The prisoners have done a great deal of hard and useful work in excavating the large cellar, constructing the cement foundation of the walls, and making water and sewage connections.

Our calculations have been a little upset by the advance in carpenter's wages from 35 cents to 45 cents per hour, as a consequence of the recent strike here, but I am in hopes that all the required work can be done for the appropriated amount.

GENERAL.

I find that the most thorough disposal of the work of the district is attained, so far as the officers are concerned, by a division of labour,—for instance—the inspection of detachments occupies for the most part the time of one officer, and it is not practicable for him to inspect every detachment each month without seriously interfering with the work of the detachments. Arrangements have to be made in advance for him to reach Berry Creek and Carbon detachments, who have only a weekly mail, and the duty of making these inspections is assigned to Inspector Shaw, who acceptably fills the office.

In order to leave myself free to attend to the preparation of the criminal cases and management of the division generally, I assign the magisterial work to Inspector Duffus, to whose judgment no exception has been taken to my knowledge, and thus we endeavour to 'keep up with the procession.'

With two capable and experienced men like Staff-sergeant Wilson and Sergeant Hetherington for plain clothes work, a capable and hardly worked office staff, and a body of non-commissioned officers and men who take considerable pride in themselves and have a befitting sense of esprit de corps, the work required of us should be carried out to the satisfaction of the district at large.

I have the honour to be, sir,

Your obedient servant,

R, BURTON DEANE, Supt.,
Commanding 'E' Division, Calgary.

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APPENDIX B.

ANNUAL REPORT OF SUPERINTENDENT G. E. SANDERS, D.S.O., REGINA.

REGINA, November 1, 1906.

The Commissioner,
R.N.W.M. Police,
Regina, Sask.

SIR,—I have the honour to submit the annual report of Depot Division for 1906.

The report covers a period of eleven months from November 30, 1905, due to the fact that we are ordered to close it a month earlier than has been the custom hitherto.

Having been transferred here just three months ago from the province of Alberta, where I have served for the last twenty years, I have not had the time or opportunity to thoroughly grasp the conditions, entirely new in many respects, which are found in this division and the large district over which its numerous outposts are spread. Depot Division might be described as a home for the wanderers and the lost of the force, whenever a constable or a detachment gets completely out of touch with civilization in the far north, or away from their own division in the eastern provinces or elsewhere, they are tacked on to the depot. Our muster roll includes men at Herschell island within the Arctic circle, Fort McPherson, Norway House and Split lake near the shores of the Hudson bay, besides detached officers and men in Ottawa and at other places.

GENERAL STATE OF THE DISTRICT.

The district over which Depot Division has police control covers a much larger portion of the map and has a far greater population than any other in the force. From the Manitoba boundary to the west the district extends 232 miles, and from the international boundary to the north 216 miles, embracing an area of approximately 50,000 square miles. Within this space is found the finest of the farming lands of the province of Saskatchewan, and naturally it is to this same portion of the province that the largest stream of home-seekers are flowing, and our difficulty is to keep pace with the police requirements which are correspondingly increasing.

The wonderful growth going on over the whole of the two new provinces is attracting more and more the attention of the whole world, with the result that the influx of population shows no sign of diminution. Another successful harvest has added to the general prosperity, and given an impetus to all commercial and agricultural matters. Banks are opening branches, railways building and new towns coming into existence at the rate of two or three a month. With all this activity and visible progress the people are naturally contented and most optimistic. Transportation, which is the most important aid to the development of a new country, has, in the shape of railways, made rapid strides during the last year. Survey parties locating new lines are met by our patrols in every direction. The Canadian Pacific Railway are busy extending their line from Strassburg north, and in close proximity the Grand Trunk Railway grading outfits may be found at work.

The fact that two great companies can be seen building their roads within sight of one another is, I believe, unique in the history of railroading. The Canadian Pacific Railway have built northwest from Moosejaw a line connecting the Soo and Arcola branches and the Wolseley and Reston branch.

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CRIME.

It is in those portions of the district which are most settled that nearly all the crime originates, and it is in these localities that we see more results from the detachments. Our outposts along the boundary and in those parts where the population is small and scattered have very little crime to report; it is what they prevent that goes to their credit. Experience has taught us that to remove them would at once cause an increase of horse-stealing, smuggling and kindred crimes. , ,

It is impossible to keep pace with rapidly growing requirements, and the constant appeals from small towns and settlements for police protection keeps us on the horns of a dilemma; the question to be decided being whether we should move men who are doing preventive work, taking chances on the result, and place them where their services are called for by the people. As at present situated we cannot, with the men available, satisfy both ourselves and the general public.

The following table shows the yearly increase of crime in this district from 1903 to 1906:—

	1903.	1904.	1905.	1906.*
Cases entered.....	1,162	1,591	1,620	2,021
Convictions.....	977	1,344	1,362	1,751
Dismissals or withdrawals.....	171	231	246	250
Waiting trial.....	14	16	12	20

* Eleven months.

There have been more cases of a serious nature than in the previous year.

Offences against the person.—Under this heading there is an increase of cases all round, except manslaughter, for which there is no entry.

Offences against property.—Theft shows an increase of ten and horse-stealing two. Cattle-stealing has increased by five; forgery, which is becoming prevalent, by twelve, and cruelty to animals by twenty-five cases.

Offences against religion and morals.—Both drunkenness and vagrancy have increased.

Offences against the Indian Act.—Cases entered under this heading are practically the same as last year.

Offences against Northwest Ordinances.—There have been thirty-seven more cases under the Liquor License Ordinance, and a large increase in nearly all the other ordinances which we enforce.

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SUMMARY OF CRIME IN REGINA DISTRICT.

	Cases Entered.	Convictions.	Dismissed or Withdrawn.	Waiting Trial.
Offences against the person—				
Murder.....	3	1	1	
Attempt to murder.....	3	1	1	
Threatening to shoot.....	1	1		
Threatening to kill.....	2	2		
Shooting with intent.....	2	2		
Assault.....	263	212	51	
Attempted assault.....	1	1		
Assault aggravated.....	6	6		
Assault causing bodily harm.....	5	3		
Threatening to cause bodily harm.....	1		1	
Assault indecent.....	1	1		
Bigamy.....	2	2		
Rape and attempted rape.....	8	2	5	
Attempting defilement of female.....	2	1	1	
Seduction.....	3	2	1	
Seduction under promise of marriage.....	3	1	2	
Attempted suicide.....	3	2	1	
Concealment of birth.....	1	1		
Causing injury to child.....	3		3	
Wounding.....	4	4		
Intimidation.....	4	1	3	
Pointing fire arms.....	4	3	1	
Leaving dangerous holes.....	1	1		
Miscellaneous.....	15	14	1	
Offences against property—				
Theft.....	242	191	48	
Counterfeiting.....	1			
Horse-stealing.....	10	4	5	
Burglary.....	4	2	2	
Arson.....	3		2	
Cattle-stealing.....	6	3	3	
Receiving stolen property.....	9	4	5	
Housebreaking.....	6	5	1	
False pretenses.....	16	11	5	
Forgery.....	17	9	8	
Fraud.....	1			
Intent to defraud.....	1		1	
Mischief.....	43	29	14	
Trespass.....	2	2		
Cruelty to animals.....	40	39	1	
Miscellaneous.....	22	19	3	
Defacing or altering brands.....	1	1		
Unlawfully carrying offensive and concealed weapons.....	20	19	1	
Carrying loaded firearms.....	9	9		
Offences against religion and morals—				
Vagrancy.....	88	88	2	
Drunk and disorderly.....	349	332	17	
Creating a disturbance.....	56	49	7	
Nuisance.....	1	1		
Inmate of house of ill-fame.....	3	3		
Keeper of house of ill-fame.....	2	2		
Frequenter of house of ill-fame.....	2		1	
Insulting language.....	12	10	2	
Causing disturbance.....	1	1		
Defamatory libel.....	2	1	1	
Illegally solemnising marriage.....	1		1	
Indecency.....	5	5		
Neglecting to supply necessaries of life.....	1	1		
Keeping gaming house.....	3	2	1	
Frequenting gaming house.....	15	11	4	
Buggery and accomplice.....	4	2	2	
Miscellaneous.....	13	9	4	
Misleading justice—				
Perjury.....	6	2	3	
Using cancelled stamps.....	1	1		
Escaping from custody.....	2	2		
Allowing prisoner to escape from custody.....	1	1		
Obstructing peace officer.....	7	6	1	
Assaulting peace officer.....	7	6	1	
Resisting arrest.....	7	7		
Offences against Election Act.....	3	3		
Offences against Railway Act—				
Stealing rides.....	21	21		
Trespassing.....	4	4		
Offences against Customs Act.....	12	11	1	
Offences against Indian Act—				
Supplying liquor to Indians.....	31	28	3	
Indians drunk.....	28	26	2	
Cutting and removing timber off reserve.....	1	1		

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	Cases Entered.	Convictions.	Dismissed or Withdrawn.	Waiting Trial.
<i>Offences against Indian Act—Con.</i>				
Drunk on reserve.....	5	5		
Liquor in possession.....	8	5	3	
Having liquor on reserve.....	7	7		
Prostitution.....	3	3		
Deserting from Indian school.....	3	3		
Offences against the Fisheries Act.....	8	6	2	
Offences against Animal Contagious Disease Act.....	19	17	2	
<i>Offences against the N.W.T. Ordinances—</i>				
Master and servants.....	142	134	7	1
Game ordinance.....	24	22	2	
Hide ordinance.....	1	1		
Sunday observance.....	19	18	1	
Prairie fire.....	64	53	11	
Trotting on Government bridge.....	5	5		
Liquor ordinance.....	74	68	6	
Insanity.....	49	45	4	
Village ordinance.....	11	9	2	
Pound ordinance.....	21	20	1	
Health ordinance.....	1	1		
Livery stable ordinance.....	3	2	1	
Engineers ordinance.....	12	12		
Veterinary surgeon ordinance.....	1	1		
Infraction druggist ordinance.....	1	1		
Illegal practising medicine.....	4	4		
Hawkers and pedlars.....	10	9	1	
Estray animals.....	25	25		
Brand.....	3	3		
Herd ordinance.....	1	1		
Noxious weeds ordinance.....	5	5		
Fence ordinance.....	2	2		
Miscellaneous.....	19	17	2	
	2,021	1,751	250	20

SUMMARY OF CASES BEFORE THE SUPREME COURT.

Committed for trial.....	87
Number of convictions.....	56
Fines.....	3
Sentenced to jail.....	30
Sentenced to penitentiary.....	12
Sentenced to hang.....	1
Suspended sentence.....	10
Acquitted or charges withdrawn by crown.....	12
Awaiting trial.....	20

PRAIRIE FIRES.

The returns for the year show a marked increase, there being 87 fires at which the police were called in to assist and take action. Of this number 64 were brought into court and 53 convictions obtained. A number of the fires that have occurred have been traced to the different railways, and in some cases, where the evidence was good, prosecutions ensued. With the settling up of the district the old time prairie fire of years ago is now a thing of the past.

ASSISTANCE TO OTHER DEPARTMENTS.

Department of Agriculture.

We have had an average of six veterinary staff sergeants and six veterinary surgeons doing the work of this department during the year. The work in connection

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with contagious diseases of animals, particularly glanders amongst horses, has increased in spite of the strenuous efforts made for the past few years to stamp it out. One would naturally expect a decrease in glanders after what was done the previous year and the destruction of some 653 animals. On the contrary, however, we have the reverse. It does not appear reasonable to suppose that the spread of glanders occurs from within the area I am reporting upon; we must, therefore, look outside of it, and to some locality bordering thereon where efforts to stamp out the disease are not being made. Such a locality we find in the United States to the south of us, where I understand glanders is very prevalent, but the authorities are not looking for it. This fact, and the additional one that a great temptation is offered unscrupulous Americans to transfer glandered horses to our side and obtain compensation, may account for our being able to make so little headway against the disease. Stringent rules should be enforced to prevent any likelihood of such a fraud, as I have suggested, being practised.

The following is a summary of the work preformed this year, and also that of last year for the sake of comparison:

	1905.	1906.
Tested and quarantined.....	114	663
Tested and destroyed.....	631	761
Destroyed without test.....	22	50
Tested and no reaction.....	1,190	3,219
Examined only and not tested.....	1,196	1,129

Tested twice and ceased to react 96 ; three times, 6.

	1905.	1906.
Mange—		
Horses quarantined.....	86	216
Cattle quarantined.....	41	369

At North Portal 15,205 horses, 737 mules, 8,629 cattle and 13 swine were examined during the year for entry into Canada.

At Wood Mountain 2,200 horses, 53 colts, 112 cattle and 792 sheep were examined for entry into Canada.

The amount of fees collected during the eleven months at North Portal were \$2,034.34, and at Wood Mountain \$774.57. The amount this year collected for inspection fees is double that of 1905, the immigration through these two ports of entry having been much larger than any previous year.

Customs.

Complaints made by any of the customs officials have been promptly investigated, and the usual patrols have been made along the international boundary, especially in the Wood Mountain district.

The amount of duty collected at Wood Mountain during the past eleven months, as reported by Inspector Grant, amounts to \$17,205.68, being an increase of 236.66 per cent over the takings of last year. There have been no large outfits passing through this port of entry, and the increase can only be attributed to the increased

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number of settlers coming into Canada, a great number of whom are beginning to discover that the land around Wood Mountain is worth settling on, although so far from the railway.

DEPARTMENT OF THE INTERIOR.

Indians.

Escorts have been supplied to Indian agents throughout the treaty payments. The reserves in this district have been patrolled, and there has been really little or no trouble from the Indians.

Lake Winnipeg Patrol.

Inspector Walke with two constables made the usual patrol of Lake Winnipeg with the steamer *Redwing*, and I attach this officer's report. I would especially draw your attention to that part of the report wherein Inspector Walke states that the *Redwing* is not fit for the work for which she is engaged on Lake Winnipeg, and in view of the fact that we are establishing detachments north of Lake Winnipeg which will for some years to come be permanent, I would recommend that steps be taken forthwith to purchase a really good and thoroughly seaworthy boat.

CROWN TIMBER.

During the winter one non-commissioned officer and six men were again sent into Manitoba to the same places as the year previous, namely, two to Riding Mountain, two to Woodridge, two to Rosseau, and one to Boissevain in Manitoba.

Our detachments in different parts also assisted whenever necessary at this work in the province of Saskatchewan.

GUARD-ROOMS AND COMMON JAILS.

In addition to the guard-room at Regina, we have the common jail at Moosomin under our care. At Regina 297 prisoners have been confined, and at Moosomin 122, a total of 419.

The following are the reports of Inspector Jarvis regarding the Moosomin jail, and of Sergeant Banham, the provost sergeant of the guard-room at Regina:—

THE ROYAL NORTHWEST MOUNTED POLICE,

MOOSOMIN, November 3, 1906.

The Officer Commanding,

R.N.W.M. Police,

Regina District.

SIR,—I have the honour to submit the annual report for the Moosomin Sub-District guard-room for the year ending October 31, 1906. Seven prisoners were confined in the guard-room at the beginning of the year and 115 were admitted, making a total of 122 confined during the year (classified as follows):

Males.		Females.	
Whites..	104	Whites..	4
Indians..	11		
Half-breeds..	3		
Total..	122		

The maximum number of prisoners were admitted in October being sixteen, and the minimum in February, three. The maximum number of prisoners in any day nineteen. The average admitted per month was 13.3.

Of the prisoners who were sentenced to penitentiary terms, two were transported to the Manitoba penitentiary and one to Alberta, the average term being three years.

Ten were sent to the common gaol, Regina, to serve terms the average of which was four months.

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The number of prisoners received last year was 275, or three less than the number received during the last eleven months.

The following is a classification of the prisoners:—

<i>Males.</i>	
Whites.. . . .	222
Indians.. . . .	9
Half-breeds.. . . .	15
Negroes.. . . .	1
Doukhobors.. . . .	19
Chinamen.. . . .	1
Lunatics.. . . .	20
	— 287
<i>Females.</i>	
White.. . . .	2
Lunatics.. . . .	8
	— 10
Total.. . . .	297

The monthly admittances were as follows:—

December, 1905.. . . .	20
January, 1906.. . . .	28
February “	27
March “	30
April “	25
May “	23
June “	28
July “	34
August “	22
September “	13
October “	28
	— 278

The 277 prisoners discharged from the guard-room were thus disposed of:—

<i>Males.</i>	
Time expired.. . . .	84
Sent to Regina jail.. . . .	85
Sent to Brandon asylum.. . . .	20
Sent to Stoney Mountain penitentiary.. . . .	6
Sent to Edmonton penitentiary.. . . .	3
Fines paid.. . . .	27
Handed over to United States authorities.. . . .	1
Died in hospital.. . . .	1
To other places for trial.. . . .	19
Released by order of Secretary of State.. . . .	1
Sent to town for trial.. . . .	18
Released on ticket of leave.. . . .	1
	— 266
<i>Females.</i>	
Sent to Brandon asylum.. . . .	8
Sent to town jail.. . . .	1
Sent to Prince Albert jail.. . . .	2
	— 11
	277

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The daily average number of prisoners for 11 months ending October 31, 1906, 19·06.

The monthly average number of prisoners for 11 months ending October 31, 1906, 18·49.

The monthly maximum number of prisoners in any day, 34.

The monthly minimum number of prisoners in any day, 12.

The monthly maximum number of prisoners received was in July, 34.

The monthly minimum number of prisoners received was in September, 13.

On July 22, 1906, sixteen Doukhobors were received in this guard room from Yorkton. There being no accommodation they were placed in the police gymnasium and on the following day 12 were transferred to Regina Jail. The 4 left with us were Ivan Zarnben, alias 'John the Apostle,' Alexie Osoroff alias 'St. John,' Alexie Popoff alias 'Acts of Apostles' and Vasil Dutoff alias 'Jesus Christ.' They were all sentenced to three months hard labour and completed their sentences here. A special diet was ordered them by Surgeon Bell, consisting of pea-nuts, apples, raisins, oatmeal and prunes, as they would not eat the ordinary prison rations. These men refused to work and were treated as lunatics whilst in the guard room.

George H. Gale, at liberty on ticket-of-leave, was sentenced to three months hard labour on May 11, 1906, for theft, and on completion of his term of imprisonment was re-arrested by order of Colonel Sherwood, Commissioner of Dominion Police, and sent to complete his unexpired term at Regina Jail. ,

Hugh A. Campbell who arrived here on the night of April 3, 1906, charged with being a lunatic was found by Surgeon Bell to be suffering from epileptic fits. He was at once ordered to be removed to the hospital where, in spite of all attention, he died at 12:30 a.m., of April 4, 1906. Another prisoner whose case has attracted much attention was that of Vinczeur Magyar, a Hungarian. He was brought to the Royal Northwest Mounted Police guard-room here on April 28, 1906, charged with the murder of a farmer named Donald Campbell near Oxbow. He was sent from here for trial on April 29, 1906, and afterwards transferred to Regina Jail.

An Indian prisoner, 'Bitter Nose,' arrived here August 29, 1906, on a charge of drunkenness. He was released by order of the Secretary of State on October 12, 1906, owing to an error in his conviction.

During the past eleven months the number of punishments inflicted on prisoners by the officer commanding amounted to 39. This represents a percentage of 7 per cent.

One prisoner answering to 8 infringements of prison rules and regulations, and another to 7 infringements, both of these men have done time before.

The health of the prisoners has been very good. One prisoner showing the exception being G. H. Burton, convicted of vagrancy on October 1, 1906. On arrival at guard room he was found to be very ill. When seen by Surgeon Bell he was at once sent to the hospital suffering from consumption, where he has been ever since.

With regard to the guard-room, I would call to your attention that no accommodation is provided for female prisoners en route for Prince Albert jail, or other places, or for lunatics, or persons awaiting trial. Consequently female prisoners in charge of matrons have to be lodged in a room at the back of the concert hall, to which there are neither grated windows nor locks.

Lunatic prisoners are jailed in the guard room where their noise at night provokes complaints from all the other prisoners, specially from prisoners awaiting trial, who, although not convicted, have to take their meals with convicted prisoners. The above remarks also obtain as regard police prisoners who for breach of police discipline have to be associated with the scum of Canada owing to lack of proper accommodation.

The guard room is a wooden structure decayed and old, very cold in winter, and totally inadequate for the purpose for which it is required. Accommodation is provided for only 21 prisoners: there are now 30 in jail, which necessitates 9 sleeping out of cells on the floor.

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There is no room for the Provosts, no washing room for prisoners, and the sanitary arrangements are of the most crude description. On recent examination by the officer commanding, the foundations of the guard room were found to be in a very rotten condition and the weather boarding perished. Like most old wooden buildings it is infested with insect pests.

The prison yard is very small and absolutely useless for the exercise of prisoners.

The following schedule shows the crimes under which prisoners passing through this guard-room doing time were charged with :—

Crime.	Number.
Assault.....	7
Assault on police.....	3
Attempted suicide.....	4
Attempted rape.....	1
Attempted to procure prostitution.....	1
Attempted arson.....	1
Burglary.....	1
Buggery.....	1
Carrying concealed weapons.....	4
Cattle theft.....	1
Cruelty to animals.....	1
Creating a disturbance.....	21
Drunk and disorderly.....	24
Destroying a valuable document.....	1
Defrauding creditors.....	1
Drunk while interdicted.....	1
Embezzlement.....	1
Entering a C. P. R. car.....	3
Forgery.....	3
Fraud.....	4
Held as a Crown witness.....	1
Horse theft.....	5
Having liquor in possession when interdicted.....	1
Indecent assault.....	1
Indecent exposure.....	1
Lunatics, male.....	27
female.....	8
Murder.....	1
Misappropriating Government money.....	1
Obtaining money by false pretenses.....	7
Perjury.....	1
Prostitution.....	1
Rape.....	2
Robbery with violence.....	1
Setting out prairie fire.....	1
Stealing ride on C. P. R.....	7
Shooting with intent, &c.....	1
Unlawfully wounding.....	1
Unlawfully practicing medicine.....	1
Uttering false cheque.....	2
Vagrancy.....	29
Theft.....	53
Wilful damage.....	1
<i>Indian Act.</i>	
Abandoning from Indian School.....	1
Having liquor in possession.....	2
Liquor to Indians.....	2
Drunk.....	3
<i>Police Act.</i>	
As per statement.....	26
Total.....	278

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The number of prisoners who have served, or who are now doing terms of imprisonment in guard-room, is 104, classified as follows:—

Crime.	Sentences.	Average.	
		Mos.	Days.
Assault.....	1	3	20
Assault on wife.....	1	2	.....
Assault on police.....	1	12	.....
Cruelty to animals.....	1	1	.....
Creating a disturbance.....	6	5	.....
Contempt of court.....	1	1	.....
Carrying concealed weapons.....	1	1	.....
Drunk and disorderly.....	19	2	.....
Entering a C. P. R. car.....	3	2	.....
Forging a document.....	1	1	.....
Indecent exposure.....	1	2	.....
Obtaining money by false pretenses.....	2	2	.....
Supplying liquor to an interdicted person.....	1	4	.....
Setting out a prairie fire.....	1	3	.....
Stealing ride on C. P. R.....	7	.....	25
Theft.....	22	2	15
Vagrancy.....	28	1	15
<i>Indium Act.</i>			
Liquor in possession.....	2	2	.....
Supplying liquor to Indians.....	1	3	.....
Drunk and refusing information.....	1	1	15
Total.....	104	.....	.....

I have the honour to be, sir,

Your obedient servant,

(Signed) H. BANHAM,

Provost Sergeant.

DRILL AND TRAINING.

Drills, both mounted and foot, have been maintained throughout the year, mainly in connection with the training of recruits, a squad of whom were always under instruction.

In the beginning of January a class of fifteen constables, collected from the different divisions of the force, was formed at Regina for a three months' course of training. Drill, mounted and foot, criminal law, Dominion statutes, Northwest ordinances, police duties, veterinary duties, care of horses, shoeing, stable management, interior economy, harnessing, driving and first aids were the subjects upon which instructions were given. The examination at the conclusion was unusually satisfactory, a very high percentage of marks being obtained by all. This class was inspected by Prince Arthur of Connaught on April 10 last.

As has been the custom for years past, well trained musical rides under Inspector Church were sent to the Brandon, Moosejaw and Regina agricultural exhibitions. The management of the exhibitions away from Regina paid all transport expenses. The public showed great interest in the performances and the smart appearances of the men.

Inspector Heffernan has delivered the lectures on police duties, &c. Inspector Knight, with the assistance of Sergeant Jordon, was in charge of the foot drills, and Inspector Church, assisted by Corporal Walker, looked after the mounted work. Inspector Church is deserving of great praise for the excellent manner in which all the horses passing through his hands have been trained.

MUSKETRY, ARMS, &C.

Owing to some defects being discovered in the Ross rifle it was not thought advisable to finish the annual course in musketry, and target practices ceased before the

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preliminary stage was completed. The revolver shooting with the Colt's revolver was good, and this arm has proved itself to be trustworthy and suitable for our purposes. A large number of the division belong to the rifle club, which is supplied with Lee-Enfield rifles borrowed from the Militia Department. During the summer months shooting took place every Wednesday and Saturday afternoon, the season ending up with the annual rifle matches. Excellent prizes were offered, and some very keen and close competitions resulted. The shooting on the whole was of a high average.

CONDUCT AND DISCIPLINE.

The conduct of the division on the whole has been good. The majority of the punishments were inflicted on recruits who naturally take some time to adapt themselves to new conditions, and consequently commit many small breaches of discipline. As far as possible I make every endeavour to keep a recruit's defaulters sheet clear of an entry, and it is only after repeated warnings that they are punished for trivial offences. My experience is that a man with a clear sheet tries to keep it so, whereas a well-meaning man who may by bad luck gets a few entries against him is not so particular.

There were six desertions during the last eleven months as compared with five the year before.

HEALTH.

The health of the division, generally speaking, has been very good. Surgeon Bell has been particularly careful of the sanitary arrangements, and in spite of adverse conditions such as lack of all modern conveniences in the shape of waterworks and sewerage, in some cases, quite uninhabitable houses, and a sluggish creek containing all the sewerage from the city of Regina, we have escaped any disease of an infectious or contagious nature. This is the more remarkable as typhoid fever has been epidemic in Regina and the surrounding country.

I regret to record one death, viz.:—Reg. No. 3465, Sergeant Skinner, R.H., from convulsions on June 16 last. Accidents of a serious nature were also small. There was one case of a fracture of the femur, and one of a fractured leg.

HORSES.

With the exception of an outbreak of glanders as a result of which horses Reg. Nos. 2757, 2530, 2542, 2830 and 2610 were destroyed at Yorkton, and Reg. No. 2537 at Regina, the health of the horses has been good. Accidents were the cause of death of two horses, viz.:—Reg. No. 2833 who broke his neck en route to Wood Mountain, and Reg. No. 132 who died from injuries received to the spine in a runaway. The value of this horse was refunded by the teamster who was found guilty of reckless driving and causing this accident. Only one horse was cast and sold, Reg. No. 2012, the price realized being \$20. There were fourteen cast and sold the previous year.

Twenty-three remounts were purchased and posted to Depot Division, they are all doing well.

The following statement gives the changes among the horses of the division during the period covered by this report, and shows a gain of three:—

Loss.		
Horses cast and sold....		1
“ died....		2
“ destroyed....		6
Transferred to ‘C’ Division....		7
“ ‘F’ “.....		4
“ ‘G’ “.....		1
“ ‘K’ “.....		1

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Gain.

Remounts.....	23
Transferred from 'D' Division.....	2
“ “ ‘K’ “	1
	32

DISTRIBUTION AND STRENGTH.

The following new detachments have been established during the year:—Indian Head, Cupar, Mortlach, Canora, Lumsden and The Elbow, Indian Head being the headquarters of a new sub-district. Moosejaw, Balcarres, Craik and Arcola have all been formed into sub-districts under non-commissioned officers, and I am pleased to report that the work has been well looked after.

The old detachment of Carlyle has again been reopened and placed in the sub-district of Arcola.

A detachment has been established at Split lake, 250 miles northeast of Norway House, Corporal Nicholls and two constables being there, and the detachment at Norway House has been strengthened by two constables.

It is the intention also to establish a detachment this coming winter somewhere on the Canadian Northern Railway near Winnipegosis, a mail will then be despatched to Fort Churchill via Norway House and Split lake, a total distance of about 950 miles from the railroad. This will enable tidings being received during the winter from the police in the Hudson's bay.

I beg to record the good work done by all non-commissioned officers in charge of sub-districts. They are all thoroughly competent for the work, and have shown zeal and energy in its performance.

Moosomin and Wood Mountain are under the charge of Inspectors Jarvis and Grant.

At Moosomin we have to maintain a detachment of an officer, one non-commissioned officer, and four constables owing to the fact that there is a jail there which we at present have charge of. For the police work at this point so many men are not required, and when the jail is taken off our hands, which it should be at once, the detachment can be reduced by one officer and three constables. Inspector Jarvis' report of the guard-room at Moosomin is included in my report.

In the Wood Mountain subdistrict we have an officer, four non-commissioned officers and twelve men. This is a very sparsely settled part of the country, and its importance is due to the fact of its being near the boundary, and on account of several gangs of horse thieves which, within the last two or three years, have been operating on the other side of the line. The principals, however, of these gangs are now dead, and the notorious Dutch Henry was murdered by a friend last December. Inspector Heffernan took steps to confirm the identity of Dutch Henry, and from communications he has received from Sheriff Richmond, of Roseau county, Minnesota, I am certain it was Dutch Henry who was killed. I would strongly recommend a reduction of the force along the boundary in the Wood Mountain district owing to the increased demands for police elsewhere.

We have also an officer, one staff-sergeant, one corporal and four men at Fort McPherson and Herschel island, within the Arctic Circle. A separate report is furnished of the work done.

DISTRIBUTION STATE.

Place.	Commissioner.	Assistant Commissioner.	Superintendents.	Inspectors.	Surgeons.	Staff Sergeants.	Sergeants.	Corporals.	Constables.	Supernumerary Constables.	Total.	Horses.
Regina.....	1	1	1	9	1	9	6	4	59	12	103	62
Wood Mountain.....				1		1		1	5	2	10	16
Willow Bunch.....								1	1		2	3
Bag Muddy.....							1		3	1	5	6
Moosomin.....				1					4		5	5
Whitewood.....									1		1	1
Broadview.....								1			1	1
Arcoia.....								1			1	1
Carlyle.....									1		1	1
Yorkton.....						1		1	1		3	4
Stero.....									1		1	1
Kamsack.....									1		1	1
Fort Pelly.....								1	1		2	2
Canora.....									1		1	1
Indian Head.....							1		1		2	3
Fort Qu'Appelle.....									1		1	1
Grenfell.....									1		1	1
Balcarres.....							1		1		2	2
Esterhazy.....									1		1	1
Kutawa.....									1		1	1
Strassburg.....									1		1	1
Cupar.....									1		1	1
Craik.....								1			1	1
Lumsden.....									1		1	1
The Elbow.....									1		1	1
Estevan.....							1				1	1
Weyburn.....									1		1	1
N. Portal.....						1		1			2	2
Guthrie.....									1		1	1
Carnduff.....								1			1	1
Moosejaw.....								1	1		2	2
Mortlach.....									1		1	1
Milestone.....									1		1	1
Norway House.....							1		2	1	4	4
Spitz Lake.....								1	2		3	3
Town Station.....							1		1		2	1
Fort McPherson.....				1		1		1	3	1	7	7
On command.....				1		1	1	2	5		10	10
On leave.....				1					1		2	2
Ottawa.....				1		2	1				4	4
	1	1	1	15	1	16	14	18	108	17	192	130

Joined—

JOINED AND GONE.

Newly appointed officer.....	1
Engaged.....	54
Re-engaged after leaving.....	3
Transferred from the Yukon.....	6
Transferred from other divisions.....	43

Gone—

	107
Discharged by purchase.....	11
“ “ “ (under 3 months).....	2
Invalided.....	10
Died.....	1
Discharged to pension.....	3
Inefficient.....	3
Dismissed.....	13
Deserted.....	6
Transferred to the Yukon.....	1
“ to other divisions (officers).....	2
“ “ “ (men).....	73

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Canteen.—During the past eleven months grants amounting to \$673.87 have been made. The canteen is in a flourishing condition, and there is stock valued at about \$4,500. The returns have not been as high during the past eleven months as during the corresponding period last year, owing to the smaller number of men in the post. I notice a decided tendency on behalf of those here to refrain from drinking beer. We make it a point of supplying all necessaries at as near cost as possible. The grants were distributed to the depot mess, rifle club, cricket club and various other sports.

Reading room.—Supt. Wilson, who wrote last year's report, states 'an effort was made to establish a reading room for the division, but we got no further than an estimate of the cost, and being unable to finance it, nothing further was done.' The reading room at Regina, the headquarters of the force, is a bare, inhospitable looking place, with a long table down the middle and a few papers scattered thereon. There is nothing inviting about it, and its effect on any one using it is calculated to produce a fit of the blues. A good library and some comfortable furniture is badly needed. I strongly recommend that a substantial government grant be given for the establishment of a good library and other things mentioned in this report, which are urgently required for the welfare and comfort of the command.

Bathing facilities.—Supt. Wilson, in his report for 1905, says: 'Something will shortly have to be done to provide accommodation for the men of this division. We have now two baths for the constables and one for non-commissioned officers. When you think of one hundred men attempting to take baths in these two baths, having to fill same with pails and empty them in the same manner, some idea of the discomfort may be imagined.

The ordinary washing facilities are on the same scale. 'Now that the city sewer runs into the Wascana creek, issuing the water of this creek has been stopped by the doctor and in consequence we have nothing but hard water to wash in.'

I have been unable to improve these conditions further than to have warm water constantly kept on hand so that a man can take a bath whenever opportunity offers. This is one of the matters necessary for the general contentment referred to under my remarks on a reading room.

CLOTHING AND KIT.

The clothing has been of good quality. In issuing kit to recruits great inconvenience is experienced at all times by not having a sufficient supply of certain articles on hand for issue.

BARRACKS.

The barracks have been under the inspection of a board of officers which has pronounced the officers quarters and several other buildings uninhabitable. The general appearance of the whole place is disheartening mainly owing to the old tumble-down shacks and the gloomy colour of the paint. Everything requires to be overhauled and brightened. All around us we see advancement and progress, even the government buildings for Indians are palaces compared to ours. The two carpenters in the post have been kept busy all the year at repairs such as shingling, rehanging doors, fitting windows, and patching up old buildings.

FORAGE AND RATIONS.

There is great difficulty in obtaining tenders here for hay, oats and potatoes. No tenders were received this year for these articles, although since the date for closing the tenders I have been able, after some trouble, to make fairly satisfactory arrangements until next spring.

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The provisions supplied by the Hudsons Bay Company, for the year have been in accordance with the contract. Apparently there is no good jam put up in Canada, at any rate, we do not see it in this country. All jams consist mainly of the same thing, apple or turnips, flavoured and doctored to represent strawberry, apricot, or any other fruit.

GENERAL REMARKS.

I would draw attention to a matter, which, in my humble opinion, is of vital importance to the force, and that is the overwhelming clerical work we are burdened with. The best efforts of the force are choked by the complicated returns and methods of check, involving a liberal use of foolscap forms.

A prisoner sentenced to our guardroom for a week will, I can safely say, have twenty-five sheets of foolscap devoted to him in the shape of returns, expenses, &c. Why could not we treat our prisoners as a hotel man treats his guests, render a simple little bill and have it paid?

In conclusion I would say that all ranks have worked faithfully and well and many instances of particular good service have been brought to your notice.

I have the honour to be, sir,

Your obedient servant,

G. E. SANDERS,

Supt. Commanding Depot Division.

REGINA, September 24, 1906.

The Officer Commanding,
R.N.W.M. Police,
Regina District.

SIR,—I have the honour to report that I took over command of the steamer *Redwing* and Lake Winnipeg patrol on June 1, 1906.

'Redwing.'

On June 1, 1906, I arrived in Selkirk with Assistant Commissioner J. H. McIlree and proceeded at once to inspect the ss. *Redwing*. She had been put in commission by the Indian Department officials, who engaged the crew, and had been out on a trip. The next day I took stock of everything on board and then prepared for a cruise, which was afterwards taken to Fort Alexander and Snake island, Gull harbour, &c., back to Selkirk.

On June 10 we again made a patrol in the southern portion of the lake calling at Fort Alexander, Winnipeg Beach and Victoria Beach.

On June 25 we patrolled from Fort Alexander to Bad Throat river, making a seizure at this point. From Bad Throat river we patrolled into Selkirk to prepare for the treaty party.

During our voyage around the lake we had occasion to go into nearly every port and out harbour, some being very difficult navigation. We ran on the rocks several times and were ashore twice, but as it appears to be a feature of Lake Winnipeg navigation, and the steamers thereof, did not worry as much as we did the previous year, for we were all adepts by then in pulling a boat off the rocks successfully, releasing ourselves in each instance.

Our most serious mishap was when we drove ashore at Fisher River reserve in a gale and tidal wave during the night of June 22, leaving us high and dry on the beach. We remained there four days, using every method within our knowledge and some sixty to seventy men pulling and hauling. We also hired some teams to haul trees out of the

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woods to use as skids. On the afternoon of the fourth day we tried the effects of very large logs as levers under the bows, having some twenty-five to thirty-five men on the end of each log prying. This was a successful manœuvre, for the steamer gradually slipped off into deep water very much to the satisfaction of all concerned, for things looked bad for the boat on the beach, not to speak of the great inconvenience of all hands on board with the boat lying over at an angle of some 45 degrees.

Again we got on the rocks at Poplar river, but a timely storm coming up washed us off and we put back to harbour.

Later on in the season we had a very hazardous run from Warren's landing to Eagle islands in which we were nearly wrecked. For over four hours after we arrived in sight of the light on Eagle island we could not make a yard against the gale, and only by taking a slant and easing off to the leeward of the island were we able to make any progress, and then at the extreme risk of going on the shoals (which we actually did inside the harbour, but it was not serious, for we soon got off) until we pulled up to the harbour mouth.

Our great fault appears to be the extreme weakness of the engine power. Instead of being the fastest boat on the lake she is the slowest.

CREW.

In connection with the manning of the *Redwing* I would again point out that if the police are to remain effective an all R.N.W.M. police crew be installed and a good pilot engaged who thoroughly knows the lake. All the skilled labour required would be a couple of engineers, cook and cookie, with a couple of men to act as deck hands. These men would be all effective as policemen or detectives which the ordinary crew of the boat consider they have no right to perform, although sworn in as special constables of the force.

In many instances a smart detective could be used to advantage, but having a crew not in sympathy with police work I feel certain that it makes some of our efforts abortive

TREATY PARTY.

The first treaty party under Mr. Lewis came on board on July 4, and paid treaty at St. Peters, Broken Head and Fort Alexander, arriving back the a.m. of July 13.

The second treaty party under Mr. Semmend came on board July 16, and continued with us for 46 days, going all over the lake and also making some inland trips, thousands of dollars being paid out meanwhile. In all the round of the lake we attended to our police and magisterial duties, all hands working together in unison.

PATROLS.

In the first part of June I made a patrol to the Norway House district north of Lake Winnipeg. I made exhaustive inquiries and reported upon the most feasible winter route to Fort Churchill on the Hudson's Bay.

The *Redwing* made some extended patrols, going as far north as Norway House mission, which is some thirty miles north of Lake Winnipeg.

I made a patrol to Cross lake seventy miles north of Norway House in a York boat. we shot several large rapids on the way down. A constable stationed at Cross lake would be very effective, and of great assistance to the patrols in winter.

INSPECTIONS.

I inspected the ship daily and saw that she was kept trim and neat and painted when required, also periodically inspected the arms and saw that they were kept clean

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and in order. The men being under my observation daily it was unnecessary to make any special inspection and when required were always clean, neat and properly attired. Their quarters were cleaned out, and bedding aired whenever an opportunity presented itself, and to this I attribute the entire absence of sickness and ill-health.

While at Norway House I inspected Sergt. Smith's quarters and detachment, also made arrangements for quarters for a couple of men with Sergt. Smith in case they should be stationed there this coming winter. At Grand Rapids Mr. Simpson, the local magistrate, pointed out quarters suitable for three or four men should a detachment be established there. I inspected these quarters, and found that with a few slight changes and repairs they would be central and suitable.

At Cross lake on the road between Split lake and Norway House it is possible to rent quarters near the Hudson Bay Company's post if so desired at any time. This is the only settlement and reserve of any importance between those points.

CRIME.

No crime of particular moment came to my notice on the lake this year, due chiefly to the firm manner in which the law was carried out the preceding year.

In former times I was told it was a feature of the treaty payments for the traders to smuggle whisky along with their treaty goods, and when opportunity offered, to quietly slip an Indian the bottle, and then make him susceptible to part with his cash for different kinds of shoddy goods and trinkets.

This year intoxication was found to be absent at the treaty payments to a marked degree, in fact only a few cases did we find, and they were promptly disposed of. The watch kept on each reserve was rigid indeed.

In the Keewatin district Sergt. Smith is in charge, and on both my visits to his detachment he informed me he had no cases to bring to my notice; he considered the people of his district a very law-abiding community indeed.

As I reported last year and after again visiting all the rivers, ports and reserves on the lake, I find that St. Peter's reserve, in the vicinity of Selkirk, to be the most disorderly and to have more drunkenness than all the other reserves combined, however. I may say that after our vigorous campaign against these evils this season, liquor among the Indians is almost stamped out, and our efforts are applauded by every right-thinking person on the lake, but, nevertheless, we found an undercurrent of opposition from certain of the lake men, but of which we took no notice, carrying out our duty with a firm hand.

Again we found a great inconvenience in the want of proper cell accommodation to incarcerate prisoners. Last year they were placed in the crew's cabin, which no doubt was unfair to the crew, but what could we do otherwise?

Chief Berens, of Berens' River reserve, asked if a small log jail could not be built on his reserve for short term prisoners; I referred him to the Indian Department.

There is a jail on an island at Norway House but it is never used.

By the following summary of arrests and convictions you will notice there were not so many cases as last year, the pedlars and dealers having a wholesome dread of the consequences meted out to them.

CASES.

June 26, Arthur Quesnel was charged with selling liquor without a license. He pleaded 'not guilty,' but after a lengthy hearing was adjudged guilty and fined \$100 and costs or three months imprisonment.

This case was appealed and came before Judge Myers at Selkirk who dismissed the appeal. Quesnel thereupon paid the fine and costs.

July 6, Donald Fielding, a treaty Indian of the St. Peter's reserve was arrested for being drunk, pleaded guilty, and was fined \$5 and costs. Fine paid.

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July 7, John Prenden, a half-breed, was fined \$5 and costs for the same offence, and paid his fine.

July 11, Thomas Linklater, of the Fort Alexander band was arrested for having liquor in possession, but the case was not proven, and he was dismissed.

July 11, Joe Keeper, non-treaty Indian, was charged with having intoxicants in his possession on reserve, pleaded guilty and was fined \$25 and costs. Fine paid.

July 12, N. Rosenstock, a Jew trader, was charged with being in possession of two moose skins during close season. Pledaded guilty and was fined \$10 and costs and skins confiscated.

Isaac Bear was arrested for deserting from Brandon industrial school. When brought to Selkirk he escaped, but was traced down the Red river and out on the lake to Fort Alexander, 100 miles, where he was rearrested. He being incorrigible, I deemed it advisable to send him to the reformatory at Portage la Prairie for three years, where he would learn a trade that would be of some use to him.

RESOURCES OF THE LAKE.

In the first place fishing is the principal industry or trade on Lake Winnipeg. The Dominion Fish Company do a very large business, giving employment to quite a number of men. They have several stations on the lake where fish is bought from others outside their own boats and paid for at the rate of 2½ cents per pound, orders for payment being given on the company in West Selkirk. They have a fleet of steamers, some of which carry passengers, which in their route run from one fishing station to another and collect the freight.

In recent years fishing has become less profitable than formerly owing to the scarcity which now exists compared with the abundance of a few years back, and the government has this year placed Fishery Inspector Young in one of the largest boats on the lake, the ss. *Premier*, for the prevention of illegal practices in fishing, in the endeavour to prevent the depletion of the lake.

SHIPPING.

As far as business or trade goes on the lake, shipping probably comes next to fishing.

There are quite a number of steamers plying on Lake Winnipeg, the majority of which are owned by the Dominion Fish Company, who do nearly all the passenger trade (as well as freight), which is perceptibly increasing every year owing to the number of families who now spend a vacation on the lake during the summer months.

The freight business is also fairly extensive, and is increasing each year as the lumber and cordwood industries progress.

FARMING.

Farming is carried out on a small scale, but chiefly amongst the Indians. It could not be said to be in a flourishing condition, as in most cases it is pursued as a means of subsistence and not as a business.

LUMBER.

There are several saw-mills on the lake stationed at Fort Alexander, Bad Throat, Grammary, &c., and quite a fair amount is cut during the season, although the quality is not what could be termed first class, still this branch of business is worthy of further encouragement, and the chances on various parts of the lake for pushing this trade may be said to be good.

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There is quite a large cordwood business conducted on different points of the lake to supply the various steamers, cordwood being the principal fuel used; it might in fact be said to be the only fuel used if we except gasoline, with which some of the smaller launches are run.

The Hudson's Bay Company have stores close by all the reserves for the purpose of trading in furs and skins with the Indians, repaying them with food, clothing, guns, ammunition, &c., to enable them to carry on their livelihood.

Trading is not carried on to any large extent on the south end of the lake, further north skins and furs are plentiful.

There are quite a number of independent traders besides the Hudson's Bay Company, but they scarcely get one-quarter of the trade, and do not figure very largely on the lake.

MILEAGE.

The distance covered by the *Redwing* during treaty and patrol trips was in the neighbourhood of 2,000 miles. On September 21, upon instructions received from headquarters, I laid up the boat in the usual winter quarters for such boats at Selkirk, and handed her over to the care of the local Indian agent, together with an inventory of all the stores which had been placed in the government fish hatchery.

On September 22 I left for Regina, Constable O'Neill having been ordered on detachment at Norway House, and I reported on the a.m. of September 23, 1906.

I have the honour to be, sir,

Your obedient servant,

W. M. WALKE, Insp.,

In Command Lake Winnipeg Patrol.

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APPENDIX C.

ANNUAL REPORT OF SUPERINTENDENT P. C. H. PRIMROSE, COMMAND-
ING 'D' DIVISION ROYAL NORTHWEST MOUNTED POLICE,
MACLEOD.

MACLEOD, ALTA., November 1, 1906.

The Commissioner,
R. N. W. M. Police,
Regina.

SIR,—I have the honour to forward herewith my annual report of 'D' Division for the eleven months ended October 31, 1906.

GENERAL STATE OF THE DISTRICT.

The year has been one of steady growth and prosperity. Cattle business has been good and large shipments of beef have been made. Stock on the range are in splendid condition. Crops have been exceedingly good all over the district. In the early spring it was thought that the fall wheat would be a failure, but during the month of May rain fell in great quantity, followed by fine hot weather in June and July, which brought a great growth, and a great harvest was reaped; thrashing is not yet completed, a great scarcity of labour having been felt everywhere.

The towns on the C. and E. railway line have made great progress, building operations being carried on as fast as the available labour will allow. Claresholm has installed new water-works, electric light plant, new bank building and a number of business and private buildings. Leavings has a new station, elevators and is nearly double what it was last year. Nanton, Stavely and Cayley are also keeping pace. Carleton Place has also shown great activity, waterworks, electric light, elevators and a new brick hotel have been added since last year; several villages are rapidly growing in the vicinity, Kimball, Taylorville and Etna are among the largest. Macleod is putting in waterworks; a flour mill and a elevator have been built.

On the Crow's Nest line, Pincher Creek, which was incorporated into a municipality during the year, and has now a population of about 1,000, has extended a good deal; a new large flour mill and elevator are being built. Cowley, which is a town of about 200, is the centre of a large farming district, thickly settled.

In the towns west of this, mining is the principal industry. Frank is now a good sized town; a large zinc smelter has been completed at a cost of \$500,000. It was operated for a short time, but closed owing to disagreement amongst the owners. The Canadian American Coal Company have put in a new 'tippie' capable of turning out 2,000 tons of coal a day. They have also done extensive development work; they employ on an average of 250 men. It has waterworks, electric light, a brick yard and many business concerns.

Blairmore is a small town of about 300 people. It is the headquarters of the West Canadian Collieries Company, it also ships a quantity of lime.

Coleman has increased at least one-third of its population. The International Coal and Coke Company have installed 90 coke ovens at a cost of \$80,000. The Coal Company employ about 450 men, and having a daily output of 1,500 tons of coal.

Lille, a comparatively new town, situated at the head of the Grassy Mountain railway, running out of Frank, is now an important point, the Canadian Collieries Company doing business here. Their output is about 150 tons of coke and 800 tons of coal daily. They employ about 600 men. A great deal of development work is being done.

Bellevue is a town which has practically sprung up during the year. The Canadian Collieries Company have spent here about \$200,000 in improvements. It has a population of about 250 and a daily output of about 260 tons of coal.

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Hillcrest, a new mining town, employs about 75 men.
Lundbreck has a population of 200.

SUMMARY OF CRIME.

ANNUAL REPORT from December 1, 1905, to October 31, 1906.

Crime.	Cases Entered.	Convictions.	Dismissed, Withdrawn, or not Tried.	Remarks.
Offences against the person—				
Assault.....	71	66	5	1 withdrawn.
Assault, wife.....	1		1	
Abortion.....	2		2	2 awaiting trial.
Attempted suicide.....	2		2	
Child stealing.....	1	1		
Child abandonment.....	1		1	
Extortion by threats.....	2		2	
Indecent assault.....	3	1	2	
Incest.....	1		1	
Rape and attempted rape.....	3	1	2	1 awaiting trial.
Threatening to kill.....	1		1	1 " "
Threatening.....	4	4		
Wounding.....	2		2	2 awaiting trial.
Offences against public order.—				
Obstructing peace officer.....	4	1	3	
Perjury.....	2	1	1	
Unnatural offence.....	1	1		
Keeping house of ill-fame.....	4	4		
Inmate house of ill-fame.....	12	8	4	
Offences against property—				
Theft.....	43	27	16	1 awaiting trial.
Horse stealing.....	21	7	14	2 " "
Cattle stealing.....	5	2	3	3 " "
False pretence.....	9	5	4	1 " "
Forgery.....	2		2	2 " "
Malicious mischief.....	7	7		
Burglary.....	1	1		
Cruelty to animals.....	10	7	3	
Unlawfully carrying weapons.....	4	4		
Poisoning and killing dogs.....	3	2	1	
Shooting horse.....	1	1		
Bringing stolen property into Canada.....	2		2	1 withdrawn and 1 awaiting trial
Infraction quarantine Act—	6	6		
Infraction Customs Act—	5	4	1	
Infraction Fisheries Act.....	6	5	1	
Against religion and morals—				
Vagrancy.....	12	9	3	
Drunk and disorderly.....	137	135	2	
Indecent acts.....	8	8		
Swearing.....	6	6		
Disorderly conduct.....	9	9		
Selling pools.....	2	1	1	1 awaiting trial.
Creating disturbance.....	13	13		
Against Indian Act—				
Supplying liquor to Indians.....	23	20	3	
Drunk on Reserve.....	34	34		
Intoxicants, in possession.....	2	1	1	
Deserting from Indian School.....	4	4		Ret'd to school.
Trespassing on Reserve.....	1	1		
North-West Ordinances—				
Masters and servants Act.....	30	22	8	4 withdrawn.
Prairie and forest fire Act.....	10	9	1	
Infraction liquor license Act.....	58	55	3	
Insanity.....	8	5	3	
Practising dentistry without license.....	1	1		
Infraction game ordinance.....	11	11		
Infraction livery stable ord.....	1	1		
Infraction hide ord.....	5	4	1	
Infraction brand ord.....	2	2		
Infraction stray animals ord.....	6	4	2	
Infraction horse breeders.....	2	2		
Infraction chemists and druggists ord.....	1	1		
Infraction bridge ord.....	6	6		
Infraction road allowance ord.....	6	5	1	
Infraction weights and measures Act.....	1	1		
Operating steam boiler without certificate permit.....	1	1		
Violation municipal ordinance.....	1	1		
Peddling without license.....	7	7		
Total.....	650	545	105	

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Date of Court.	Cases committed.	Conviction. No. of.	Penitentiary.	Jail.	Fine.	Suspended Sentence.	Cases Dismissed.	Nolle Prosequi.
Feb. 6th, 1906.....	3	1		2		1	2	
May 31st, 1906.....	6	4	1	2		1	1	1
June 4th, 1906.....	5	1	1	1				2
July 21st, 1906.....	1	1	1					
July 25th, 1906.....	3	3	1	2				
Sept. 12th, 1906.....	9	7	5	2			1	1
	27	18	9	7		2	5	4

CRIME—GENERAL CONDITIONS.

I am glad to be able to report that there has not been the same increase in the number of criminal cases as in the previous year, although for the past eleven months we have a few more cases than we had altogether in the twelve months preceding. One of the most important features in this matter has been the increase in the number of convictions which have been obtained, and taking it that the true deterrent to crime is the certainty that punishment is going to follow the crime, and not the severity of the punishment, this should tend to reduce the number of cases in future. Last year we had 132 cases dismissed, withdrawn or not tried, and this year we have only 105. I must again invite your attention to the providing of some proper place of confinement for juvenile offenders, as it becomes a question of the greatest perplexity to know what to do when we have some of these incorrigibles to deal with. I am of the opinion that if farmwork could be secured for them, a considerable distance out in the country, and completely away from town or village surroundings, it would be the best place for boys requiring correction.

I am glad to be able to say that the offences of horse and cattle stealing and killing have been reduced, from my last report from 31, to this year 26 cases, although the greater number of convictions in the Supreme Court are still for this class of offence. But as this is the centre of a great horse and cattle growing industry, it is naturally to be expected that this class of offence would predominate.

Ticket-of-leave prisoners, of whom we have quite a few, are behaving themselves and reporting with due regularity, but it appears to me some of them obtain their tickets-of-leave before they have served a great length of time.

There is a very important question which I would ask, that some action might be taken upon it at as early a date as possible, and that is the identification of prisoners. At the present time the only means which we have of identifying prisoners is their description, which is not very much use. I am not prepared to offer any suggestions on this subject, as to what is the best system to adopt, but simply urge that a system be adopted at as early a date as possible, as it stands at present, its want is a serious handicap in the detection of crime and the prosecution of offenders.

The winter assizes held in February, 1906, before the Hon. Chief Justice Sifton, contained a very small docket, and there was just one conviction to record, that against Wm. H. Harris for the theft of a few small articles of rope, &c., it was a case which would have been more properly tried before a magistrate than to have been sent for trial before the Supreme Court.

The next court which was held was at Pincher Creek, between May 29 and 31, before the Hon. Mr. Justice Scott, and the first case on the list was one of attempted suicide, in which the Crown entered a *nolle prosequi*.

There have been quite a number of these attempted suicides in the country, and there is practically never anything done, as apparently the juries and judges consider the injury sustained principally directed against the persons themselves, and that

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they are more to be pitied than punished; and further, that they seldom make second attempts on their lives.

Two Slavs named Joe Janiga and Gus Carlson, from the mountain towns of the Crow's Nest Pass were convicted of assault, and the former sentenced to four months imprisonment in Macleod guard-room, and the latter released on suspended sentence. These assaults amongst these people are of frequent occurrence, and are the usual wind-ups to weddings, and christenings, as it would appear that at these festivities, considerable stock of beer is secured by the barrel, with the result that towards the latter end of the proceedings rows take place, and these would not amount to very much provided only the Anglo-Saxon method of settling their differences, viz., the fists, were indulged in, but unfortunately a number of these foreigners resort to other methods, which certainly require to be frowned down upon if a stop is to be put to that style of crime.

A most peculiar case of horse stealing was tried at this court, and the peculiarity was the resulting of the dismissal of both men. Mr. Cameron, of Coleman, lost some horses; he subsequently discovered that they had been shipped out of the country and sold in the neighbourhood of Regina by one Wm. Sawyer, of near Cowley. Sawyer was charged with stealing these horses, and he claimed to have purchased them from James Miller of near Pincher Creek. Sawyer was first tried, and in his defence claimed he purchased them from Miller, who upon being questioned as a witness, swore directly that he had never sold these horses to Sawyer. The judge gave Sawyer the benefit of what doubt there was, and acquitted him; and then, because he did not believe the Sawyer family's evidence, declined to go on with the case against Miller.

The next assize was opened at Macleod, on July 25, 1906, the Hon. Chief Justice Sifton presiding. The first case disposed of was that of Harry Varnoe. It would appear that after the departure of the east-bound train from Coleman, Alta., and there being no further trains that night, the night operator was lying down on the bench in the inner office of the station, near the telegraph key, and the lamp turned down, he was suddenly aroused and discovered a man at the safe, in possession of an iron wedge, and with his boots off. In a very plucky manner he grappled with this man and dragged him across to the Coleman Hotel, where he instructed the porter to go for the police, when Varnoe was locked up. I might mention that this office had been burglarized on two occasions before, and the perpetrators were never brought to justice, and I am quite satisfied that Varnoe was one who had known of these previous burglaries, and considered the Coleman station an easy mark. He was convicted and sentenced to three years imprisonment in the Manitoba penitentiary.

Benjamin Parrish, a one-legged man who had lately come from the United States, with an invalid wife and a boy of about sixteen, over whom the father had no control, and with little or no means, had taken up a homestead to the northwest of Meadow lake, on a slope of the Porcupine hills, was convicted of horse-stealing, and on account of his family's situation, was let off with a term of nine months imprisonment in Macleod guard-room. It would appear that the boy, who did nothing but ride round the country picking up other peoples horses, would take horses home to his father, telling him some fairy tale as to how he had become possessed of them, and the father, who cheerfully believed these stories and accepted the horses and trafficked in them, expected the outside public to also believe these innocent stories.

Between the 12th and 14th September, the Hon. Chief Justice Sifton made a special jail delivery, to relieve the congestion in the guard-room. At this court four Indian boys, named Philip Hoof, 'Yellow Creek,' 'Charlie Davis,' and 'Willie Crow Shoes' were all convicted of horse-stealing, and sentenced, respectively, to four three, two and three years in the Edmonton penitentiary. This slide-out horse-stealing case was very much on a par with the Fishburn horse-stealing case of two years ago. These Indian boys picked up horses of ranchers quite close to the reserve, and then ran them off about 30 miles north, and sold them at a ridiculously cheap figure to some farmers lately arrived in the country from the United States. There is a certain class of these

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people in this country who encourage this class of offence, as a man who has been accustomed to handling stock for a number of years must know that when he is offered a \$120 horse for \$40 or \$50 that there must be something crooked about the transaction, and I am seriously contemplating proceeding against some of these people for receiving stolen property.

One Frank R. Wilson, who was acting for his father, who was the sub-agent of Dominion lands at Macleod, was convicted for obtaining money by false pretences, and sentenced to two years in Edmonton penitentiary. It appeared from the evidence that he withheld a quarter section from the public, as not being open to entry, and told the applicant that he knew of a place which a man had taken up, but which he was willing to relinquish provided he could get some one who would recompense him for the outlay which he had been put to in connection with his entry. Mr. Weerstra consented to do this, and paid him, in addition to the \$10 entry fee, an additional sum which he said the previous applicant required, and it afterwards transpired that this was all a myth, and that the quarter section had been open for entry all the time, and there had been no previous applicant who required to be paid.

A. T. Bishop was convicted of horse-stealing and sentenced to three months imprisonment in Macleod guard-room.

One Fred. Irvine, a painter, at Hillcrest, was charged with indecently assaulting one of the chambermaids at the hotel there, convicted, and sentenced to six months imprisonment at Macleod.

I am very pleased to be able to call your notice to the very intelligent manner in which the non-commissioned officers and constables are taking hold of this increased criminal business, and the interest which they display in following their cases to a successful conclusion.

PRAIRIE FIRES.

I am glad to report that the district has been remarkably free from prairie fires during the last year. The increase in settlement, and greater care being exercised by farmers have no doubt been to a great extent the cause.

ASSISTANCE TO OTHER DEPARTMENTS.

Justice.—Orderlies have been supplied for sittings of the Supreme Court and police courts where trials were held.

Prisoners have been escorted to and from these courts, to the penitentiary or to the guard-room at Macleod when sentenced. We have taken charge of all prisoners committed for trial, and of those sentenced to the guard-room, and furnished guards for those sentenced to hard labour, made their accounts and supplied medical attendance to those sick or injured.

We have served all subpoenas for witnesses in cases before the Supreme Court and taken charge of exhibits such as horses, and charged only the actual cost of forage for them. We have had some of these in our stables almost continually during the year.

Interpreting in court in Indian cases was done by our interpreters.

We have kept track of ticket-of-leave men, saw that they reported monthly, in accordance with the Ticket-of-leave Act, and reported the same to the Dominion Police at Ottawa.

Customs.—We have rendered such assistance as we could for the protection of the revenue. The N.C. officer in charge at Twin Lakes has acted as sub-collector at that point.

The N.C.O. at Frank reports to the collector any matter which comes under his notice in the Crow's Nest Pass relating to customs.

The detachment at the Kootenai Pass was re-established in June last, and the constable in charge acted as sub-collector.

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Several seizures of horses for smuggling were made by our men, the parties were arrested, convicted, and the horses sold by the Customs Department.

Meteorological.—The temperature and state of the weather were recorded daily, and a weekly report was forwarded to this department at Toronto.

Indian Department.—We have arrested several deserters from the industrial schools; these were escorted back to the schools. Watch has been kept on the Indians to see that they did not sell or dispose of their produce without authority from their agent.

The detachment at Stand Off and on the Peigan, have attended the issue of rations on each reserve every week.

We have two interpreters and five police scouts. Indians, who are paid from police funds, and kept mainly for the benefit of the Indian Department.

Provincial Government.—The officers at Macleod, Pincher Creek and Cardston have taken the majority of police court cases in these places, and nearly all the preliminary examinations in the district.

We have reported anything coming to our notice requiring attention, regarding roads and bridges.

We have acted as fire and game-guardians.

We have taken charge of all lunatics from this district, while awaiting the pleasure of the Lieutenant Governor, and escorted them to the asylum.

We have rendered accounts for the maintenance of, and all expenses in connection with prisoners. We have looked after indigents, and in cases of death have made arrangements for their burial.

GUARD-ROOM AND COMMON JAILS.

I give here Regt. No. 1649, Sergt. Haslet's report. This N.C. officer has performed the duties of provost during the year to my satisfaction:—

R. N. W. M. POLICE,

MACLEOD, October 31, 1906.

SIR.—I have the honour to submit the annual report of 'D' Division guard-room for the eleven months ending October 31, 1906.

Seventeen prisoners were confined in the guard-room at the beginning of the year, all sentenced to terms of imprisonment. Two hundred and twenty-three were admitted, making a total of 240 confined since December 1, 1905, classified as follows:—

Males—

Whites.. . . .	174
Indians.. . . .	44
Half-breeds.. . . .	12
Total.. . . .	230

Females—

Whites.. . . .	2
Indians.. . . .	2
Half-breeds.. . . .	6
Total.. . . .	10

Daily average number of prisoners, 18.

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The maximum number of prisoners was admitted during August (31), and the minimum (10) during March.

Of the male prisoners, 4 were transferred to the Manitoba penitentiary, with an average sentence of 4 years and 6 months; 5 to the Edmonton penitentiary, with an average sentence of 2 years, 9 months and 18 days. One was arrested and handed over to Constable Wilson, of the British Columbia police, who took the prisoner back to Fernie, B.C., where he was wanted on a charge of theft. Four were Indian boys who had deserted from the Indian industrial school at Dunbow. They were sent back. One Thomas Smith, destitute, suffering from paralysis, was sent in from Frank, and after being here a day, was sent to the general hospital. One Thomas Ford was found near Brocket, where he had attempted suicide by cutting his throat with a razor, while suffering from delirium tremens. He was confined on August 6, and committed for trial on August 15 for attempted suicide. He appeared before Judge Sifton on September 12, and was acquitted. Five were arrested, wanted in other places in the province, where they were sent back. Six were confined as insane, 4 of whom were sent to the Manitoba asylum. One C. E. Wilber, confined on May 9, died in hospital on May 28, from uræmic poisoning. One was kept under observation for six days, and discharged as sane.

Of the female prisoners, 4 half-breeds were convicted for supplying intoxicants to Indians; they were committed to the Calgary guard-room with an average sentence of four months. Two were Indian women confined on suspicion of insanity. They were handed over to their friends. One white woman (insane) was committed to Calgary guard-room to await the pleasure of the Lieutenant Governor.

Twenty-one male prisoners were awaiting trial for an average period of 31 days; 18 were admitted to bail.

The general health of the prisoners has been excellent.

Prison discipline is strictly enforced. Very few punishments were inflicted.

The buildings are in good repair, with the exception of the floors.

The number of prisoners confined in the guard-room is increasing every year. The awaiting trial and sentenced prisoners are kept in different wards, the first ward consisting of 10 cells, and the second consisting of 13. During the greater part of the year the guard-room has been overcrowded, necessitating the prisoners doubling up in the cells, which is very unsatisfactory. We have no place for females, juveniles or lunatics. We require at least 15 more cells, viz., 2 receiving cells, which would prevent unclean prisoners, such as vagrants, from bringing vermin into the cells, which they are bound to do under the present conditions. Three padded cells are required for lunatics. We have none of these at present, and only recently a lunatic prisoner was confined, who had to be kept in a straight-jacket and also have a man in his cell constantly to prevent him from knocking his brains out against the wooden wall; which he several times attempted to do. And we require at least 10 more cells for sentenced and awaiting trial prisoners.

I have received a fair amount of clothing for the prisoners during the past year, but am still badly in the need of winter clothes, and I beg to suggest that a prison uniform be supplied; many prisoners are serving terms of 6 months and over, and are wearing various kinds of clothing, which is not in very good condition and is totally unfit for the winter.

Some months ago an electric gong was installed in the passage between the barrack-rooms, which is connected with the guard-room. This will prove invaluable in case of an emergency.

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The following table gives details of the prisoners who have served during the year, or who are at present serving sentence. The number of prisoners who have served or are now serving terms of imprisonment and sentenced this year was 62, classified as follows:—

Crime.	Sentence.	AVERAGE TERM.	
		Months.	Days.
Males—			
Drunk while interdicted.	2		22
Drunk and disorderly.....	6		29
Insubordination.....	1		3
Vagrancy.....	4	2	8
Stealing ride of C. P. Railway.....	1		7
Removing animals from quarantine....	2		22
Obstructing road allowance.	1		10
Assault.....	5	1	27
Indecent assault.....	1	6	
Theft (1 case appealed).....	8	3	26
False pretences.....	3	2	20
Disturbing the peace, tumultuously....	5	2	18
Indecent act.	1	2	30
Evading Customs.....	2	1	15
Breaking quarantine.....	2	2	
Being in bar room during prohibited hours.....	1		10
Refusing to pay wages.....	1	1	29
Habitually frequenting house of ill-fame (appealed)....	1	2	
Horsestealing.....	2	6	
<i>Indian Act.</i>			
Males—			
Drunk.....	8	1	11
Supplying liquor to Indians.....	4	1	23
Having liquor in possession (appealed).....	1	3	

I have the honour to be, sir, your obedient servant,

(Sgd.) W. HASLETT, Sergt.,

To the Officer Commanding,

R. N. W. M. Police,
Macleod.

DEPARTMENT OF AGRICULTURE.

Assistance to other Departments

Our Agricultural Department staff during the past eleven months has been, Dr. Warnock, of Pincher Creek, who has been devoting himself principally to the disease of dourine throughout the whole of Southern Alberta, and it has kept him pretty continuously employed during the whole time, but he has also been able to inspect various shipments of stock and to attend to some cases of suspected glanders. Owing to his being able to devote his attention principally to this disease, and the fact that owners have been paid compensation for animals which have been destroyed, I think the disease is pretty well in hand, as horse owners, having been thoroughly frightened, are not taking any chances with regard to unknown stallions, or permitting any to run at large, as they did in the early days.

Staff-Sergeant Douglas has been in charge at the quarantine station at Twin Lakes, and inspected all importations through that channel into Canada. He is also Customs Preventive Officer at that point.

Veterinary Staff-Sergeant White has been stationed at Macleod, and has been kept on the run nearly all the time. In fact, one man at this point, in this ranching country, is not able to keep up with the work, and consequently I hear much growling from people who are delayed in having their business attended to. Of course the Order in

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Council of July 23, 1906 providing for the veterinary inspection at Winnipeg of all cattle going into Winnipeg and east of Winnipeg, has certainly very much reduced the labours of the inspectors in this district, during the beef-shipping months, and has certainly helped considerably, and I am further of the opinion that better results from the Agricultural Department standpoint will be obtained, from the inspection at Winnipeg, as the animals at that time would not be nearly so wild.

Owing to our willingness to immediately have all suspected unknown diseases of horses and cattle attended to upon their being brought to our notice, or upon our hearing of them, there are a certain number of people who would like to ask for free veterinary attendance for their stock in cases of disease or complaints which are not of an infectious or contagious character, but still this has not deterred our inspectors from promptly attending freely to any cases of a suspicious nature.

On the subject of mange, of course we have heard very little during the past eleven months, and there have been very few cases, but I am curiously awaiting the arrival of this winter, which will tell the tale as to whether or not the dipping has been successful in practically eradicating this disease.

Some 26 cases of mange, 40 cases of *maladie du coit*, and 14 cases of glanders were attended to by the veterinary inspectors in this district. Staff-Sergt. White reports testing 26 horses with mallein, for glanders, 14 of which were destroyed, either having shown clinical symptoms or a reaction, and for which \$996.65 was paid in compensation.

The numbers of horses and cattle inspected by Staff-Sergt. Douglas at Twin Lakes port of entry during the past eleven months is as follows:—

Cattle.	411 head.
Horses.	1,370 "

During the eleven months ended October 31, 1906, there have been inspected in this district, for shipment, 2,470 horses and 8,082 head of cattle. These do not include animals shipped for export, and inspected at Winnipeg.

INDIANS.

The population of Indians in the district is now about 1,200 on the Blood reserve, and 487 on the Peigan. This is about the same as last year on the Blood reserve, and a small decrease on the Peigan, the deaths having been in excess of births.

They have given very little trouble, and with the exception of a few cases of horse-stealing, cattle killing, there has been no crime amongst them. Of course there are always a few cases of drunkenness.

Sun dances, without the repulsive features of former years, took place on both the Blood and Peigan reserves. They were very tame affairs, and a good number of the younger Indians took little or no interest in them.

On the Blood reserve a large number are employed putting up hay for various parties, and the Raymond sugar industry gives employment to many. They raise all the beef at present issued to them. There is as yet no grain raised on the reserve.

On the Peigan reserve the number of self-supporting Indians is increasing. Nearly 200 buy their own beef, and all buy their own flour. They derive quite a revenue from the sale of beef, horses, hay, potatoes and some grain. A good number obtained employment in the surrounding districts this fall, getting \$2 a day, or \$4 with a team.

SUPPLYING LIQUOR TO INDIANS.

(1) In possession—

	1906.	1905.	1904.
Cases.	2	3	2
Convictions.	1	2	2
Dismissals.	1	1	

(2) Supplying to Indians—

	23	15	25
Cases.	23	15	25
Convictions.	20	13	20
Dismissals.	3	2	5

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	1906.	1905.	1904.
(3) Drunk on reserve—			
Cases.....	34	25	49
Convictions.....	34	12	41
Dismissals.....	..	13	8
(4) Intoxicated—			
Cases.....	..	19	39
Convictions.....	..	9	25
Dismissals.....	..	10	14
(5) In possession on reserve—			
Cases.....	..	..	2
Convictions.....	..	..	2

DISTRIBUTION AND STRENGTH.

The strength of the division is ten men under what it was at this time last year. The few men in the post are continually on duty, the principal part of which is guards and prisoners escort. The latter is monotonous, of long hours and very trying to young constables. Some of the detachments are short-handed, and others are required in several places, but I have no men to supply them.

The Cardston subdistrict, comprising Cardston, Twin Lakes, Boundary Creek and Big Bend is since September in charge of Inspector Taylor, who was transferred from the Yukon. He replaced Inspector Irwin, who was retired to pension.

Inspector Belcher was transferred to this division in August, and has charge of the Crow's Nest Pass subdistrict. His headquarters are to be at Blairmore, where he will be closer to the centre of his work, but there being no quarters available for a detachment at that point, he has been instructed to remain at Pincher Creek until a suitable place is built at Blairmore. His family is at Blairmore. Inspector Allard, who had charge of Kipp and Stand Off detachments near the Blood reserve. Peigan and Porcupines near the Peigan reserve, Claresholm, Nanton and Leavings, has been transferred to the depot and an officer is required to take charge of these detachments and do duty in the post.

DISTRIBUTION State of 'D' Division, October 31, 1906.

Place.	Superintendent.	Inspectors.	Staff-Sergeants.	Sergeants.	Corporals.	Constables.	Special Constables.	Total.	Horses.	Ponies.	Total.
Macleod.....	1	1	3	1	4	15	6	21	28		30
Blairmore.....		1				2		4	6		7
Pincher Creek.....				1		2	1	2	3	1	3
Kootenai.....					1	1		2	2		2
Frank.....					1	1		1	1		1
Coleman.....					1	1		1	1		1
Lille.....		1			1	1	1	4	6		6
Cardston.....			1			2		3	2		3
Twin Lakes.....					1	1		1	1		1
Boundary Creek.....					1	2		2	3		3
Big Bend.....					1	1		1	1		1
Kootenai Pass.....				1		2	3	6	6		6
Stand Off.....					1	1	1	2	1		1
Kipp.....					1	1	1	2	1		1
Peigan.....					1	1		2	2		2
Porcupines.....					1	1		2	2		2
Claresholm.....					1	1		1	2		2
Nanton.....					1	1		1	1		1
Leavings.....						4		4			
Attached.....											
Total.....	1	3	4	3	8	41	13	73	69	4	73

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DRILL, TRAINING AND MUSKETRY.

Owing to the shortness of men and the great amount of work it was found almost impossible to have drills. During June and July all the men in the post were put through squad drill in the early morning.

Rifle practice with the new Ross rifle was started in July, but these rifles having been found defective it had to be discontinued.

The division was put through revolver practice mounted and dismounted. In order not to take the men away from their work the men of the Cardston subdistrict were put through by Inspector Taylor, and those of the Crow's Nest Pass subdistrict by Inspector Belcher at Pincher Creek and Frank; those on the C. and E. Railway, at Claresholm, and the balance in Macleod by Inspector Starnes.

CONDUCT AND DISCIPLINE.

With the exception of two cases, where two constables on different occasions were found guilty of striking the constable in charge of their detachment, the conduct of the division has been very good.

There were five desertions during the year.

HEALTH.

The health of the division has been very good, with very few exceptions.

Regt. No. 4284, Constable Thunder, was taken with rheumatism in December last and was in hospital very seriously ill until June, when he became convalescent, took his discharge and returned to his home in England.

Regt. No. 3800, Const. R. C. Robertson, was overtaken in a bad storm going to his detachment in the Porcupines; he was badly frost-bitten and under treatment in the hospital for some time.

HORSES.

I again wish to make the same recommendation that I have made for the last four years, and in which my experience is simply strengthened each year, on the subject of the purchase of horses. Under the present conditions with the few men we have, not nearly all of whom have been accustomed to the handling and care of horses, the getting of remounts in large numbers is not advisable. We are not able to handle 8 or 10 horses at a time; they may be broken, but are not perfectly gentle, and are unaccustomed to sights, sounds and unusual objects, and consequently require careful handling. They are not fit to be sent to detachment and do real hard work, and should be kept at headquarters for six or eight months. When kept in the post in large numbers it is impossible to keep them sufficiently exercised, and they acquire bad habits. Again, if they have to go into sick stable for some reason, when they come out they have to be practically broken over again. This could be obviated if horses could be picked up in ones and twos when good opportunities offer throughout the year.

At the present time we require about 15 horses in order to rest those that have been doing hard work. I consider that any horse that has done 3,000 miles in a year requires a month or more of rest. He becomes leg-weary, which accounts for slips, strains and falls. A number of the horses which we have are fast verging on the time when they will have to be cast unless rested.

I would also like to call your attention to the great need we have of a pasturage. What we had south of the barracks has been rendered useless by the railway cutting our access to it, and the portion north in the valley cannot be fenced on account of a trail running in the centre of it.

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TRANSPORT, HARNESS AND SADDLERY.

The transport in the division is in good repair, and sufficient with the exception of a single trap of some kind as supplied to other divisions, which is very much needed. We have no single vehicle in the division. One or two one-seated, light wagons, such as supplied in 'A' Division, would prove very useful for short, quick trips, where a light load has to be carried.

The harness is in good repair, and sufficient for our requirements.

The saddlery is also in good repair, and sufficient, with the exception of head collars, a few of which are required.

CANTEEN.

The canteen has been doing well, for the small number of men in the post. A good stock of articles which men require is kept on hand, and found very convenient.

READING-ROOM AND RECREATION-ROOM.

The canteen contains a good billiard table, and the bowling alley is always ready for use. The reading-room, which is in a separate building, is a comfortable, well-lighted place; it contains, besides the papers which are supplied from the fine fund, a good library which is kept up by personal subscription; there are now about 800 books in this library. The number is increasing from time to time by the latest books published being ordered from eastern publishers.

STORES.

The clothing and kit supplied has been of good quality.

The provisions which have been supplied locally by contractors were of good quality.

BUILDINGS.

The buildings in the post, and the detachments at Pincher Creek, Kipp and Stand Off are badly in need of painting outside, in places the paint is completely worn and washed away by the weather, leaving the wood exposed. A new stable is required at Pincher Creek.

The other buildings are in good repair.

GENERAL.

Inspector Irwin, after 27 years' faithful service in the force, was retired on pension from July 1.

I wish to draw your attention to the necessity for painting at an early date the barracks at Macleod, and to point out the saving which will thereby be effected, owing to much of the woodwork being at the present time weather-worn. The buildings at Kipp, Stand Off, Big Bend and Pincher Creek are also badly in need of painting.

As the town of Macleod is now laying the pipes for the waterworks system, which they are installing, it would be a most opportune time for us to have the water laid down in the barracks here, as we could by so doing effect an enormous saving in the \$1,000 per annum which it now costs us for our present water supply.

In April, 1906, at your directions, I proceeded to Gleichen to receive, representing the force, H.R.H. Prince Arthur of Connaught, on his visit to the Blackfoot Indian reserve, and I was accompanied by Inspector Camies, and a travelling escort and 4 four-in-hands for the purpose of driving H.R.H. and suite to such points as they

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desired to visit. Their visit passed off very successfully, and I was complimented upon the smart appearance of the men and horses. I wish to express to you my regret at losing the services of Inspector Camies, who was transferred from the Crow's Nest Pass district to the Peace Yukon trail, as after eighteen years' active experience in police work his services were very valuable.

I would invite your attention to the strength of the division decreasing, and the work increasing, and therefore consider that the members of the division are deserving of much more credit for the work and assistance which they have given in their endeavours to put down crime, and afford protection to life and property.

I have the honour to be, sir,

Your obedient servant,

P. C. H. PRIMROSE, Supt.,

Commanding 'D' Division.

APPENDIX D.

ANNUAL REPORT OF SUPERINTENDENT J. O. WILSON, COMMANDING
LETHBRIDGE DIVISION, ROYAL NORTHWEST MOUNTED POLICE.

LETHBRIDGE, October 1, 1906.

The Commissioner,
R. N. W. M. Police,
Regina, Sask.

SIR,—I have the honour to submit the report of 'K' Division for eleven months ended October 31, 1906.

I took over the command of 'K' Division on January 29, 1906, from Superintendent Begin, J. V.

GENERAL STATE OF THE DISTRICT.

This portion of Southern Alberta has had its most prosperous year, the crops have been good and the area under cultivation much larger than in any previous year.

Settlers have been coming in in larger numbers than heretofore, and indications point to a much larger settlement next year. Land has advanced in price and the irrigated, and what is known as the dry, lands are selling rapidly.

The Chin Coulee district, heretofore only used for grazing, is now settling up with farmers, while in the Little Bow district the ranchers are complaining bitterly of the number of settlers who are gradually fencing up the range.

Taber is fast growing into a town of importance, they have three hotels with several places of business going up rapidly. The mines there have been sold to a company which will make great improvements next spring, and greatly increase the output of coal. A new town has been started at Brunton, now called Warner, about 25 miles south of Stirling. A great amount of land has been sold in this vicinity, and settlers are busy putting up their houses and preparing for winter. The majority of the new settlers in the district are Americans and appear of a good class and with considerable means. Whether farming will be found profitable in this portion of the district is a matter of conjecture.

Lethbridge has been incorporated as a city; there have been a number of good residences erected, while the Hudson Bay Company's and Jobbing Company having now about completed two very handsome and commodious places of business. The new union station is now occupied and the old one is being torn down. The Canadian Pacific railway are also building new freight sheds 400 feet in length and a twelve-stall round-house.

CRIME.

I note in looking over the report of last year that there has been a slight increase in the number of cases entered for the past eleven months, there being 204 against 149 for the year ending November 30, 1905. The increase is confined to no particular offence, with the exception of horse-stealing, and the number of cases entered gives but a very poor idea of the prevalence of the crime, in this southern district. Horses are now higher in price than they have been for years, and consequently greater risks are taken, the gain being proportionately larger, if not detected. The rapid settlement of the northern part of the province has made a good market for horses, and gangs of

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thieves have been operating from the south, driving bunches of horses north and disposing of them to these settlers, these thieves are no novices at this business but are organized gangs, with, I think, accomplices north, who easily dispose of the stock. It is a simple matter to steal horses which are allowed to roam the ranges and seen, perhaps, once in a year by their owners, and sometimes not that. On the other hand it is a difficult matter to detect the thieves, for one reason we seldom hear of the loss of horses till the thieves have had sufficient time to dispose of them, and get out of the country, or perhaps settle down as respectable members of the ranching community. Most of the stock-owners are also found to be very loathe to give us information, either from fear of having their own stock molested, or for reasons best known to themselves.

I am pleased to report that we have been able to recover about 120 head of horses stolen from different persons. Forty of these belonged to parties in Montana. Of the eleven cases of horse-stealing entered, three of them were against an Indian named Teddy Keg who was on these charges sentenced to 3 years in the penitentiary at Stoney Mountain, the other conviction was against a young Englishman named Peter Levitch who was sentenced to two years. Four cases against Robert Endersby are now awaiting trial.

For obvious reasons I do not care to go into particulars as to the last theft, but hope, in my next report to have something to say on this subject.

Cattle Rustling.—I cannot say whether this has increased during the past year, but I am inclined to think it has, judging by the rapid increase of some of the herds in this district, and from the numerous reports received: this is not the same class of work as is done by the horse thieves, who take chances and drive their ill-gotten gains north for sale. The cattle rustler rides the ranges with a running iron strapped to his saddle and generally in stormy weather and picks up calves which have arrived at the age to be easily weaned from their mothers, it is only a work of a few minutes for these experts to rope the calf and drive it to some place where it is held till it would not be claimed by the mother, or recognized by the owner. Fortunately for these rustlers, and unfortunately for the settlers a number have settled in the district with small bunches of unbranded cattle. In this connection I have issued orders to patriots to warn all such settlers to have their cattle branded. The using of running irons should be prohibited and a penalty be provided for any one in possession. These irons are a convenience in the hands of honest men, where in a round-up a rancher's cattle are found a long way from their range the increase is branded by the round-up, using the straight iron or running brand, but in the hands of the dishonest, and it is well known that this is the class who carry them, it is most dangerous.

A strike in the A. R. and I. Company's mine was declared on the 1st of March. I had had information prior to this that if a settlement was not made the men were decided to go out, consequently I notified you and increased the strength in barracks by withdrawal of men from detachments. On the first night of the strike there was an explosion, breaking windows in the house of a working miner. Matters seemed to look very serious and I considered that a show of force would be the most effective way of preventing bloodshed or damage to the company's property. I consequently asked for more men, and an officer and 15 men were sent from Macleod, and an officer and 6 men were sent from 'A' Division. I then established a camp at the mines, consisting of 29 non-commissioned officers and men with three officers. Inspector Belcher being in command. This camp was established on the 11th of March, and the village patrolled night and day, by mounted parties: guards were also placed on the works. Conditions quieting down and a number of men were returned to their divisions. All was fairly quiet till the beginning of April when two riots occurred, eight of the rioters were sentenced to imprisonment by Judges Scott and Harvey. Explosions occurred frequently in the village—two in one night. The great danger in this strike, was the fact that so many of the miners were in the possession of dynamite and other explosives. Most stringent orders were issued by me that bloodshed was to be avoided, and that

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great care must be taken not to take sides either with the strikers or the company. The officer was also in possession of the Riot Act and had instructions to read it, should all other measures of quelling a disturbance fail.

As matters quieted down the men were gradually withdrawn, till now we have only one man on duty at the mines, although the strike is not yet settled.

I consider that good judgment was shown throughout this strike, by our men who, on several occasions were placed in very trying positions. A shot fired by some hot-head would no doubt have meant considerable bloodshed.

As you are aware, this strike has greatly hampered the division in the performance of other duties throughout the district.

PRAIRIE FIRES.

The district has been remarkably free from fires during the year, only two fires being brought to the notice of the police. One resulted in a conviction and fine of \$25 and costs.

ASSISTANCE TO OTHER DEPARTMENTS.

Justice.—Three sittings of the Supreme Court held during the year in December, March and July, when court orderlies were supplied.

Guard-room and Cells.—The Lethbridge guard-room is the common jail for the district. The guarding and escorting of prisoners has taxed our reduced strength greatly, constables being employed as escort daily for weeks without intermission, and this duty is considered a most irksome one by young men who prefer more active employment. We have only six cells in the guard-room, and this year were obliged to keep prisoners in the room over the orderly-room, necessitating extra guards. There is absolutely no accommodation for female prisoners, fortunately we do not have many, but this year we have had three.

The following is the provost's report:—

ROYAL NORTHWEST MOUNTED POLICE,

'K' DIVISION, LETHBRIDGE, October 31, 1906.

The Officer Commanding,

R. N. W. M. Police.

'K' Division, Lethbridge.

SIR,—I have the honour to submit the annual report of 'K' Division guard-room for the year ending October 31, 1906.

At midnight of November 30, 1905, there were in the cells 10 prisoners, consisting of 6 sentenced to terms of imprisonment and 4 awaiting trial.

During the year 140 prisoners were received, making a total of 150 prisoners, compared with the total number of prisoners received last year, this shows an increase of 45. They are specified as follows:—

Males—

Whites.. . . .	108
Indians.. . . .	18
Half-breeds.. . . .	3
Negros.. . . .	2
Lunatic.. . . .	3
Total.. . . .	134

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Females—

Whites.. . . .	2
Indians.. . . .	2
Lunatics.. . . .	2

Total.. . . .	6
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Number of prisoners received in December, 1905.. . . .	6
“ “ January, 1906.. . . .	10
“ “ February, 1906.. . . .	15
“ “ March, 1906.. . . .	17
“ “ April, 1906.. . . .	24
“ “ May, 1906.. . . .	3
“ “ June, 1906.. . . .	8
“ “ July, 1906.. . . .	15
“ “ August, 1906.. . . .	23
“ “ September, 1906.. . . .	12
“ “ October, 1906.. . . .	7

Total.. . . .	140
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The daily average number of prisoners were.. . . .	10·02
The monthly average number of prisoners were.. . . .	12·72
The maximum number of prisoners in any day.. . . .	24
The minimum number of prisoners in any day.. . . .	3
The maximum number of prisoners received in any month was in April.. . . .	24
The minimum number of prisoners received in any month was in May.. . . .	3

These prisoners were disposed of as follows:—

Males—

Time expired.. . . .	55
Sent to Brandon asylum.. . . .	1
Sent to Stoney Mountain penitentiary.. . . .	4
Sent to other places for trial.. . . .	7
Fines paid, cases dismissed, &c.. . . .	67
Sentenced to Macleod guard-room.. . . .	5
In cells at midnight of October 31.. . . .	5

Females—

Sent to Brandon asylum.. . . .	1
Fines paid, cases dismissed, &c.. . . .	4
Time expired.. . . .	1

Total.. . . .	150
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The number of prisoners who have served, or who are now serving terms of imprisonment in the guard-room is 109. These are classified as follows:—

Crime.	Number of Sentences.	AVERAGE TERM.		
		Years.	Months.	Days.
Assault.	6		3	10
Assault on police.	7			25
Carrying concealed weapons when arrested.	1		3	
Drunk whilst interdicted.	3			10
Drunk and assault.	2			20
Drunk and disorderly.	25			3.5
Drunk and resisting arrest.	1		2	20
Drunk and contempt of court.	1			28
Fraudulently obtaining money order.	1		3	
Horse stealing.	2	2	6	
Obstructing police officer.	1			15
Obtaining money under false pretenses.	1		3	
Theft.	6		4	15
Uttering forged cheque.	1	3		
Unlawful assembly.	1		2	
Vagrancy.	16			8.5
<i>Indian Act.</i>				
Males—				
Supplying liquor to Indians.	10		1	27
Drunk.	18			13.8
Females—				
Drunk.	1		1	

GRAND SUMMARY.

In cells at midnight November 30, 1905....	10
Received during the year ended October 31, 1906..	140
Total.....	150
Discharged during the year ended October 31, 1906..	145
In cells at midnight of October 31, 1906.....	5

I have the honour to be, sir,
Your obedient servant,
W. H. WILSON, Corporal,
Provost.

Teddy Keg, horse-stealing.—An Indian, Teddy Keg, committed a number of thefts of horses; he commenced by stealing a mare and colt from the reserve, which he sold first opportunity and travelled further on and continued to steal a horse and sell as occasion arose, until he was arrested after stealing a horse at Lethbridge. He was committed for trial on four charges of horse-stealing and one charge of stealing a saddle and bridle. He was sentenced to three years in the Manitoba penitentiary on all these charges except one which was allowed to be withdrawn by the judge.

Rioting.—Several cases of rioting occurred at the Alberta Railway and Irrigation Company's coal mine after a strike was declared, a number of the ringleaders were arrested and seven of them committed for trial, and all were sentenced to terms in the common jail by the judge.

Obstructing peace officers.—After the strike commenced the police had great difficulty in arresting any of the strikers who committed offences. The person arrested

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would usually resist, when a number of the other strikers aided by the women would attempt to rescue. A number were arrested and tried summarily and sentenced to short terms of imprisonment or fined.

STATEMENT of Criminal Cases committed for trial before Supreme Court.

Offences.	No. of cases committed for trial before Supreme Court.	No. of convictions.	No. of Fines.	No. of sentences in Gaol.	No. of sentences in Penitentiary.	Remarks.
Horse-stealing.....	7	4			2	One sentenced on 3 charges.
Uttering forged documents..	1	1			1	
Theft of post office letter...	1	1		1		
Theft of express order.....	1					
Rioting.....	7	7		6		One on 2 charges
Assault.....	4	3		3		
Theft.....	1	1				Released on suspended sentence.

The following is a classified statement of cases entered, convictions made and dismissals in the Lethbridge district during the year ended October 31, 1906:—

Offence.	Entered.	Convictions.	Withdrawn or Dismissed.	Awaiting trial.
Offences against the person—				
Assault.....	32	25	6	1
Intimidation and threatening.....	3	1	2	
Offences against property—				
Theft.....	10	7	2	1
Horse-stealing.....	11	4	3	4
Housebreaking.....	1		1	
Uttering forged documents.....	1	1		
Offences against public order—				
Causing explosion.....	2			2
Rioting.....	11	8	3	
Carrying pistol when arrested.....	1	1		
Offences against religion and morals—				
Seduce girl under sixteen.....	1		1	
Vagrancy.....	25	22	3	
Frequenting house of ill-fame.....	2	2		
Discharging fire arms.....	1	1		
Disorderly conduct.....	9	4	5	
Drunk and disorderly.....	35	34	1	
Offences against Indian Act—				
Indians intoxicated.....	13	13		
Indians having liquor in possession.....	2	2		
Indians, supplying liquor to.....	15	8	7	
Offences against administration of justice—				
Obstructing peace officer.....	9	9		
Offences against public works—				
Fencing road allowance.....	1	1		
Offences against N. W. T. ordinances—				
Masters and servants.....	2	1	1	
Insane.....	4	2	2	
School.....	1		1	
Prairie and forest fires.....	1	1		
The liquor license.....	5	3	2	
The livery stable.....	2	2		
The game.....	1	1		
The hide.....	1	1		
Totals.....	202	154	40	8

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Department of Agriculture.

Owing to the compulsory dipping order being rescinded the work has not been so heavy this year. The inspection of all stock for Winnipeg and points east of there, at Winnipeg, has also lessened the work. Staff-sergeant Gallivan of this division left for Winnipeg on the 2nd August to examine cattle at that point, he was replaced by Dr. Townsend, who left to-day for his home in the east. Three range riders were employed in the spring to ride the range in search of diseased animals, especially cases of mange and maladie du coït; they were sent to the experimental station and instructed in the different symptoms; they were discharged after about two months service. I am inclined to think that maladie du coït is on the decrease, while mange though in no wise stamped out is certainly not as bad as last year. A number of cases of glanders have been found, but fortunately confined to a ranch south of Pendant D'Oreille and at Raymond.

Our veterinary sergeants at Coutts and Pendant D'Oreille still continue to inspect all stock.

The following is the number of stock entered, and fees collected for the eleven months ended October 31, 1906, at Coutts:—

No. of stock entered.	Free.	For Duty.	Total.
Horses..	988	4,191	5,179
Mules..	13	2	15
Cattle..	191	3,217	3,408
Sheep..	2	6,616	6,618
Goats..	...	5	5
Swine..	1	....	1

Amount of fees collected, \$2,273.05.

Number of cattle dipped, 966, and fees collected, \$483.

Number of cases which were refused on account of disease, 1; and Mr. J. L. Peacock's horses, 728 head and 159 colts.

At Pendant D'Oreille—

No. of stock entered.	Free.	For Duty.	Total.
Horses..	240	3,182	3,422
Mules..	1	6	7
Cattle..	34	217	251
Sheep.. . . . .	...	....	....
Goats.. . . . .	...	....	....
Swine.. . . . .	...	....	....

Amount of fees collected, \$1,105.40.

Number of cases of stock being refused admission on account of disease, nil.

WINDMILL AND DIPPING PLANT AT COUTTS.

We have had endless trouble with the windmill at this point, it has been continually breaking down and almost always when wanted. The cost of repairs would have put in a new mill of sufficient strength to withstand the high winds, it is now broken and I would recommend it being replaced with a gasoline engine. The vat is also in bad shape and will have to be rebuilt, the excessive rains of this spring after the continued dry weather caused the bank to force the side of the vat in. It would appear that lumber used in the construction of this vat was too light. The dipping of stock entering Canada at Coutts this season, to say the least, has been most unsatisfactory.

CUSTOMS.

We have not been called upon for any special work in connection with this department other than our boundary detachments, have patrolled the frontier. I am satisfied that considerable stock has been smuggled, but what this would be, were the detachments withdrawn it is hard to estimate.

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The non-commissioned officer in charge at Pendant D'Oreille acts as a sub-collector of customs. \$20,550.45 was the amount of duty collected at this post.

A seizure of horses (47) was made by me at Stettler, in possession of William Bain of Wild Horse. This man Bain was a store-keeper at Oldham, Montana, with a ranch on this side of the line. He took a bunch of 175 horses north for sale, was several times held up by the police and was able to show a let pass signed by Staff-Sergt. Greenwood for the 175 horses all branded.

Constable Tucker who was at Lethbridge, on being asked by me if there were many horses going north for sale, told me of this bunch being at Stettler. I looked up the brands of horses entered, and found that no such horses were shown, so wired the police to hold the bunch. Staff-Sergt. Greenwood was brought into barracks under close arrest, and subsequently reduced to the rank of constable and sentenced to one month's imprisonment, and dismissed from the force, it having turned out that he never saw the horses in question, but gave Bain the pass so that he would not be bothered by other veterinary inspectors. Mr. Stunden and I went carefully into the matter, with the result that Bain was assessed duty, paid value on 47 head of horses, which we were able to show had been smuggled, the duty amounted to \$1,992, which with expenses cost him about \$2,100. A bunch of yearlings were seized by my order at Coutts, they having been driven over by Chas. Farrell, of Sweet Grass. Mr. Stunden collected double duty on them and released them.

We have now a case where it is suspected about 200 head of horses were illegally imported, but for obvious reasons, I cannot go into particulars. The sheep men along the American side of the line have now placed mounds on the line so that they may not be caught in Canadian territory.

The number of American cattle on this side of the line during the past year has been small in proportion to what it once was. Two round-ups have visited Canada, both of which were accompanied by a member of this force, one reported outwards at Willow Creek and the other at Coutts. As a member of our force cannot be expected to be an expert brand man, and his duties being to see that the Canadian cattle are not needlessly disturbed on their range or driven out of Canada, and this being especially for the protection of the ranchers, I think it is incumbent on them to appoint a man to accompany the round-up parties and advise the police if any Canadian brands are being driven off their range. The expense of this man might be borne by the Americans in charge of the round-up.

INDIAN DEPARTMENT.

We have not much to do with Indians in this district, the Blood reserve being in the Macleod district, a number of them trade in Lethbridge, and there have been about the usual number of offences under the Indian Act.

DISTRIBUTION STATE.

Place.	Superintendents.	Inspectors.	Staff Sergeants.	Sergeants.	Corporals.	Constables.	Special Constables.	Total.	HORSES.			
									...	...	...	Total.
Lethbridge.	1	1	1	3	2	1	1	16	8	6	1	15
Coutts.			1	1	2	2	1	8	4	2	1	7
Writing on Stone.										2		2
Pendant d'Oreille.			1	1		1	1	4		4		4
Wild Horse.						1		1		1		1
Milk River Ridge.						2		2	1	2	1	4
Grassy Lake.						1		1		1		1
Little Bow.				1				1		1		1
Stafford Village.						1		1		1		1
On command			1					1				
Totals.	1	1	4	6	1	18	3	34	13	20	4	37

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Drill and training.—The men in the post were put through a course of setting up drill. During the summer it was impossible to get sufficient men for drill purposes. The whole division, with the exception of Staff-Sergts. Gallivan and Dennis, and Constable Lunn, completed the annual target practice.

Nine non-commissioned officers and constables in this division are entitled to wear crossed revolvers. Sergt.-Major Raven and Constable Ashe tied for first place in the revolver shooting with a score of 331.

The scores with the Ross carbines were very poor.

Conduct and discipline.—The conduct on the whole has been good, although there has been a number of serious charges during the year. I attribute this largely to want of sufficient time for outdoor sports and recreation.

Health.—The health of the division has been good. Constable Kirk was operated upon for appendicitis. Staff-Sergt. White and Constable Figgins of 'D' Division, were attached for treatment under Acting Assistant Surgeon Mewburn, F.H., so also Supt. Deane, of 'A' Division, and Constable Milner, of 'F' Division.

Horses.—There are 33 horses and 4 pack ponies in this division, a loss of seven during the year. The following have been transferred to Regina in September: Reg. Nos. 2573, 2574, 2665, 2753, 2955, 2956 and 2996. While horses Reg. Nos. 2070, 2333 and 2379 have been cast and are to be sold by public auction on the 10th proximo. This leaves me very short and I hope they will soon be replaced. The horses, considering the work required of them have stood the work well, being under horsed is false economy. One horse per men for detachment duty is not sufficient, each man should at least have two horses, in order to cover the country properly. Team horses Reg. Nos. 2058 and 2882 are about done. Inspector Burnett recommended turning them out for the winter, they were consequently turned out, but as I found it impossible to get along without them, I had to bring them in, they will not last another season's work. The remainder are in good working condition, with the exception of Reg. No. 129, which has been turned out for the winter having strained the muscles of the back.

The mileage for the year is as follows:—

	Miles.
December.. . . .	8,912
January.. . . .	9,074
February.. . . .	10,659
March.. . . .	8,224
April.. . . .	9,937
May.. . . .	10,111
June.. . . .	9,207
July.. . . .	9,419
August.. . . .	9,915
September.. . . .	10,583
October.. . . .	11,823
Total.. . . .	107,864

Transport and harness.—The transport and harness is getting old and should be replaced.

Canteen.—Owing to the reduced strength of the division the canteen was closed on September 11, the expenses exceeding the sales. The cash in hand with no liabilities amounts to \$613.47. The grants given to the division from canteen profits amount to \$161.24 for the past eleven months.

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Reading and recreation room.—A small circulating library has been started and a supply of sporting goods were purchased by the canteen, but have not been used as a sufficient number of men could not be had for outside games.

Stores.—The clothing and kit supplied has been of good quality. The provisions, also of good quality and according to contract, with the exception of bacon and jam.

Forage.—No contract has been let for oats, but purchased as required, the quality was good. The contract for hay was very unsatisfactory, it being of poor quality, and the contractor also failed to complete his contract.

General remarks.—Something will have to be done with the men's barracks here, as you are aware it is in a most delapidated condition.

No. 2 officer's quarters requires a foundation. We have the stone on the ground.

I trust, sir, that you will recommend that an appropriation be made for the installation of the water and sewerage system into the barracks, when everything is taken into consideration, the first cost would be saved in a short time, we now keep a man and team to haul the water, while we are unable to enjoy any of the comforts of modern conveniences which, outside of the force are considered an absolute necessity.

Inspector Belcher, C.M.G., has relieved me of nearly all of the magisterial work, a work he is especially adapted for.

I wish to bring to your favourable notice Reg. No. 1,128, Sergt.-Major Raven. C.C. This non-commissioned officer has proved himself to be a hard working and efficient non-commissioned officer.

I have the honour to be, sir,

Your obedient servant,

JAS. O. WILSON,

Supt. Commanding 'K' Division.

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APPENDIX E.

ANNUAL REPORT OF SUPERINTENDENT J. V. BEGIN, COMMANDING
'F' DIVISION, PRINCE ALBERT.ROYAL NORTHWEST MOUNTED POLICE,
PRINCE ALBERT, November 10, 1906.The Commissioner,
R. N. W. M. Police,
Regina, Sask.

SIR,—I have the honour to render you herewith the annual report of 'F' Division and District under my command for the year ended October 31, 1906. I assumed command in February last.

GENERAL STATE OF THE DISTRICT.

The large increase of settlers this year over all previous years, who have come to settle down in this district, either to take up land or follow commercial and other pursuits of life, establish the fact that this part of the country is arousing interest and is becoming recognized as an important and central point of the province.

In the absence of any unforeseen circumstance, to the detriment of the country, this district will, in the course of a few years, be one of the most prosperous centres of the west.

The exceptionally large yield of farming products in the district this year is due to the ideal weather which we have experienced throughout the year.

CRIME.

The criminal record in my district for the past eleven months shows an increase on the previous twelve months, but considering the immense increase in the arrival of immigrants in this part of the country, people of all nationalities, and including, in many cases, the tougher element, the increase is not remarkable. The classified list of crimes shows the number of cases entered as 380; convictions, 286; dismissals, 78; and awaiting trial, 16.

The more important cases during the eleven months are as follows:—

1. Murder.—On 17th May, 1906, 'Jumbo' was arrested, charged with killing one Isaac Mitchell. It appeared that the two had had a brawl together, and that Mitchell had died a week later through the effects of the fight. He was tried on the 31st July and acquitted by the jury.

2. G. E. Olsen; obtaining money under false pretenses.—In November and December, 1905, this man made out a number of cheques for small amounts and proceeded to change them at different business houses in Prince Albert, knowing that he had nothing in the bank. Getting over-bold, he then went to Saskatoon and wrote one out for \$55, which he cashed at a store. A complaint was made and Olsen speedily arrested. Unfortunately, in cases like these, most business men would sooner put up with the loss than admit that they had been fleeced. Afterwards some of the others

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came forward, and there were five charges against him. He was sentenced to nine months imprisonment in Prince Albert jail, with hard labour.

3. Joseph Boyer.—This lad is only about 19 years old, yet he managed to escape twice from custody. He first stole a horse and steer. He was arrested on the 9th December; charge of stealing horse was dismissed, owing to his returning the horse. He was committed for trial on the 11th, but escaped same night. He was soon recaptured. He was tried and got nine months for the offence and nine months for escaping from Prince Albert jail. On the 12th May he again escaped from the jail and was again recaptured. He got another twelve months for this offence.

4. David Jones, alias William Howard, forgery.—On the 27th June this man wrote out a cheque on the Bank of Hamilton, Saskatchewan, and forged the name of John Vance thereto. He then presented the cheque for payment. The teller being suspicious, ascertained that it was a forgery. Jones, in the meantime, made himself scarce. He was arrested at Saskatoon. At July sitting of the court he was sentenced to four months' imprisonment in the Prince Albert jail.

5. Alf. Corden was arrested on the 7th June for obtaining a buggy and harness at Prince Albert under false pretense. He was arrested at Duck Lake. This seems to be a failing with this man, as previously he was wanted on four charges of a similar nature in other towns. He, however, was dismissed on the above charge, and was re-arrested on the others and sent to Regina, where he awaits trial.

6. Byron Johnson, alias James French; theft of horse and saddle.—On the 19th May this man walked into a livery stable at Saskatoon and coolly took out a horse and saddle and rode off. When it was discovered, chase was given and he was eventually arrested on trying a similar game at Lloydminster. He awaits trial.

7. Laroque and Lafleur; horse stealing.—These two men, in company with another, stole a number of horses in 1903, afterwards selling them. They managed to escape to the States. Search was made for them everywhere. Sergt. St. Denis went to the States at the time, but could get no trace of them. After being free for over three years, they were at last captured in Montana and brought back to Duck Lake, where they were committed for trial. They are awaiting trial now. These are the only important cases that I have to report.

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The following table gives a classified summary of the cases entered, convictions made and dismissals, in the Prince Albert district. There is a number of cases in the city of Prince Albert, which are tried by local justices, and I have no record of them.

Classification.	Cases Entered.	Convictions.	Dismissed.	Waiting Trial.
Offences against the person—				
Assault.....	55	40	15	
Assault, common.....	10	9	1	
Assault, aggravated.....	1	1		
Assault, indecent.....	2	2		
Threatening to do bodily harm.....	3	2	1	
Wounding with intent.....	1		1	
Attempted suicide.....	1	1		
Intimidation.....	1	1		
Neglect of wife.....	1			1
Libel.....	1		1	
Murder.....	1		1	
Offences against the property—				
Theft.....	50	25	21	4
Fraud.....	9	3	4	2
Forgery.....	3	1	1	1
False pretences.....	11	7	3	1
Horse stealing.....	6		2	4
Trespass.....	4	4		
Unlawfully detaining property.....	1	1		
Throwing stones.....	1		1	
Possession of stolen property.....	2		1	1
Appropriating cattle.....	1		1	
Cruelty to animals.....	6	5	1	
Selling property without disclosing a prior sale.....	1		1	
Offences against the public order—				
Pointing a gun.....	3		3	
Carrying concealed weapons.....	5	5		
Offences against morals and religion—				
Adultery.....	1	1		
Mischief and nuisance.....	10	9	1	
Vagrancy.....	40	29	11	
Attempted abortion.....	1			1
Drunk and incapable.....	50	50		
Obscene language.....	1	1		
Carnal knowledge.....	1			1
Gambling.....	5	5		
Keeping a bawdy house.....	1	1		
Inmate of bawdy house.....	1	1		
Corruption and disobedience—				
Escaping from jail and custody.....	3	3		
Voting illegally.....	1	1		
Against administration of justice—				
Indian Act—				
Liquor to Indians.....	3	3		
Offences against the N. W. ordinance—				
Game.....	3	3		
Sabbath day.....	4	4		
License Act (liquor).....	9	8	1	
Prairie fires.....	11	10	1	
Master and servant.....	29	24	5	
Herd.....	4	4		
Estray animals.....	3	3		
Interdictions.....	3	3		
Medical.....	1	1		
Peddlers license.....	1	1		
Fence.....	1	1		
Setting out poison.....	1	1		
Noxious weeds.....	1	1		
Allowing bull to run at large.....	1	1		
Total.....	380	286	78	16

There were no prisoners kept in the guard-room here, all prisoners being taken direct to the common jail.

PRAIRIE FIRES.

The country has been markedly free from prairie fires this season. With the exception of small fires, which were soon put out, there has been none at all. Two men were committed for trial for setting fire to crops, were convicted, but let off on suspended sentence.

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ASSISTANCE TO OTHER DEPARTMENTS.

Customs.—We have been able to render little assistance to the Customs Department, with the exception of the case of Willet and Fisher, where we seized a number of horses which had been brought into this part of the country by them without paying duty. The Customs Department are attending to the disposal of these at the present time.

Indian Department.—Every assistance possible is given. All the reserves are patrolled regularly, and on the occasion of treaty payments a constable is always present.

Saskatchewan Government.—Assistance is rendered in enforcing the ordinances.

STATE OF INDIANS.

The Indians on the reserves in this district are usually very quiet and occasion little trouble. Some was caused, however, when five Indians died suddenly on the Duck Lake reserve. Upon investigation it was shown that the deaths were caused by their taking internally some Florida water, which they were in the habit of buying in the town of Duck Lake. An inquest was held and the jury gave an open verdict that the deaths had been caused by their taking certain brands of Florida water which contained a large amount of alcohol.

DISTRIBUTION.

Station.	Assistant Surgeon.	Superintendent.	Inspectors.	Staff Sergeant.	Sergeants.	Corporals.	Constables.	Special Constables.	Total.	Horses.
Prince Albert.....	1	1	1	2	1	1	6	3	16	23
Duck Lake.....					1		1	1	3	3
Saskatoon.....					1		1		2	3
Hanley.....							1		1	1
Rosthern.....					1				1	1
Batoche.....							1		1	1
Gillies.....							1		1	1
Warman.....							1		1	1
Melfort.....							1		1	1
Tisdale.....							1		1	1
Cumberland House.....						1			1	
Goose Lake.....							1		1	1
Puckahn.....							1		1	1
Humboldt.....							1		1	1
	1	1	1	2	4	2	17	4	32	39

DRILL AND TRAINING—MUSKETRY, ARMS, ETC.

Owing to the shortage of men in the post all the year, there has been little time to devote to drill, and the detachment men have been all too busy to come into the post for it. However, we were able to have the annual target practice this year, and all men received a few days' drill previously. They have all been shown the new method of drill.

The Ross rifle was used, also the Colt revolver, which are a great improvement and up to date.

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CONDUCT AND DISCIPLINE.

This has been very good, and there was only one case in which imprisonment was imposed.

HEALTH.

I am glad to say that the health of the division has been splendid, there being no case of sickness of any importance, except in the case of Constable Milner, who had appendicitis. He was sent to Lethbridge, where he recovered after an operation.

HORSES.

There are now 39 horses in the division, eight of which are remounts. These have all been sent to various detachments, the old horses being brought into the post. There are six horses here which have been condemned and awaiting casting. All the horses in the division are in good condition. They are all well branded and well shod.

The mileage of the horses of this division for the past year is as follows:—

	Miles.
1905—	
December	6,543
1906—	
January	9,082
February	7,760
March	8,264
April	7,401
May	9,798
June	7,002
July	5,824
August	7,233
September	6,599
October	7,853
Total	83,359

CANTEEN.

We were unfortunate enough to lose our canteen building and furniture last April by fire. It was a comfortable place, made of logs and very old, and it was intended to soon abandon it. The contents of the room, including the billiard table and piano, etc., were all destroyed. They were, however, with the stock, covered by insurance.

Two of the spare barrack rooms have been utilized and fitted up as a canteen and recreation room, which is adequate for present purposes. The recreation room requires a new billiard table and piano in place of those burnt.

STORES.

Including the kit supplied by the department during the last year have been of good quality. Provisions are supplied by contract locally and have been of good quality. Oats were supplied from the district and were of excellent quality. Hay was shipped in bales from Duck Lake, and was of good quality.

GENERAL STORES.

Only a very small supply of general stores are kept on hand, and they are purchased locally when required.

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GENERAL.

On the 17th August, 1906, I left Prince Albert with two constables for duty, with Commissioner J. McKenna, to make treaty with Indians in the Isle à la Crosse country. The party arrived at Isle à la Crosse on the 27th instant. Treaty was made with the English River and Clear Lake Indians. The treaty commission party left Isle à la Crosse for Portage La Loche on the 30th instant, arriving there on the 5th September. Natives at that point took scrip; they, from proofs under oath, were found to be half-breeds. We left Portage La Loche on the 11th instant for Isle à la Crosse, stopping at the Narrow of Buffalo lake to conclude treaty with the Clear Lake Band, arriving at Isle à la Crosse on the 17th of the month. Treaty was made with the Canoe and Lake Indians and scrip was issued to half-breeds. We left for Prince Albert on the 26th of the month and arrived at that point on the 9th of October.

On this trip I had the advantage of making myself acquainted with the inhabitants and places of interest in this northern part of the country, which is in my district. I saw in this trip the great necessity of establishing police detachments in the following places, viz.:—Green Lake, Isle à la Crosse and Portage La Loche.

His Excellency the Governor General visited the district in September last. He visited Prince Albert, Saskatoon, and the country around Melfort and Tisdale. Teams were provided and police were in attendance at the different places required.

During the year five new detachments were established, namely:—Gillies, Goose Lake, Tisdale, Warman and Cumberland House.

Inspector Genereux was transferred in September from this division to Battleford.

Inspector Pennefather and Assistant Surgeon Madore were transferred from the Yukon to this division in September last.

Sergeant-major Parker was pensioned in August, and Sergeant-major Richardson, V.C., was transferred from Battleford to this division, also in August.

All the buildings of this post require painting.

The strength of the division should be increased to 50 rank and file. One or two duty men in the post is not enough to do the police work efficiently and keep the post in order.

All the new settlements on the railway lines and the interior of the district ask for police protection, and no doubt they are as much entitled to protection as other places. But, with the reduced strength of my division, I have not been able yet to comply with their requests.

I have the honour to be, sir,

Your obedient servant,

J. V. BEGIN.

Supt., Commanding 'F' Division.

APPENDIX F.

ANNUAL REPORT OF SUPERINTENDENT J. A. MCGIBBON, COMMAND-
ING 'C' DIVISION, BATTLEFORD.

BATTLEFORD, October 31, 1906.

The Commissioner,
R.N.W.M. Police
Regina.

SIR,—I have the honour to submit herewith my annual report for the year ended October 31, 1906.

On April 18, 1906, I took over the command of 'C' Division and the Battleford District from Supt. A. C. Macdonell, D.S.O.

GENERAL STATE OF DISTRICT.

The long promised spur line of the Canadian Northern Railway from the Junction has at last been completed, and a certain amount of freight is now being hauled on this line.

This branch line will be of great convenience especially in the fall and spring. Formerly when the ice formed we were unable to get across the Saskatchewan, and the same in the spring when the river broke up; now we will be able to go west or east from here by rail without having to wait until the river is safe.

All the small towns along the Canadian Northern Railway are growing slowly, and each town's future is painted in glowing colours by its inhabitants.

The town which has made the largest growth in the way of buildings is North Battleford, and it seems to me that every day has seen a new building go up, an elevator has also been built this year which will be a great boom to the farmers.

Battleford has also made considerable progress this year, and one large up-to-date hotel has been built, and from all accounts it is as good as any west of Winnipeg for accommodation. Yet with three hotels in this town it has frequently been found necessary by the hotels to furnish private buildings with beds so that they could provide their guests with sleeping accommodation.

A large colony of Germans arrived in the district this spring and have settled in the Tramping Lake district. All of these colonists are well to do and had good horses and cattle, as well as the necessary implements. Almost as soon as they reached here a certain number went to the Tramping Lake district and started farming operations, the remainder staying here and hauling their goods to a little camp they had below the barracks.

A fair crop was harvested by these people considering that the crop was sown on breaking, and some of it was put in late.

Any one would be surprised at the improvements these people have made in their homesteads in the short time they have been there.

A good many of them also took teams and went out and worked in the railway construction camps to make enough to see them through the winter.

A great deal of work has been done on the Canadian Pacific Railway and the Grand Trunk Railway grades. The Grand Trunk Railway grade is almost completed from Saskatoon to a place called Desmond, where they have already graded a large siding.

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The Canadian Pacific Railway have not got the grade as far as the Grand Trunk Railway. All of the grading camps have particularly the same complaint, a scarcity of labourers, and more especially during the harvest time, when a great many hands left the railway to work in the harvest fields, where wages were better. Messrs. Foley Bros. and Larson intend wintering their teams in the Round Valley, and have already contracted for 300 tons of hay to keep their teams.

The large contractors have built store-houses at the Canadian Northern Railway Junction, where they haul their supplies to the various camps.

The hospital has been crowded practically all the year, and it has been difficult to find sufficient room for the many patients they have had, a new part was added this year, but it was not large enough to meet the requirements. This is not to be wondered at considering the large tract of country that at present depends on the Battleford hospital. Typhoid fever was the principal cause of filling the building, and the majority of the cases were from the various railway and survey camps throughout the district. One is not surprised at such being the case, when on examination of the various camps it is found that the water the camp depends upon is some slough, that cattle and horses have been watered at for years.

There is another small hospital in the district which is at Lloydminster. This has also been full, and the accommodation found insufficient.

A steel bridge has been contracted for by the provincial government which will join the north side with the south. This will be one of the greatest boons to the district as it will allow farmers to haul their supplies to Battleford at any time of the year, and not have to wait until the Saskatchewan river freezes up.

All the small towns along the Canadian Northern Railway from Warman to Lloydminster have hotels, and some elevators.

At Langham there is a good flour mill and elevator; they are also boring for oil on the banks of the Saskatchewan, and on account of the indications the engineers seem hopeful of striking oil. If oil is found in paying quantities it will make Langham one of the towns of the province.

Ranching is extensively carried on in the Sounding Lake country and along the Battle river, but many of the ranchers are now being forced to look out for new feeding grounds, on account of settlers taking up homesteads in their grazing lands.

On April 21, an information was laid by Clyde B. Smith against R. C. Pettypiece for fraud by obtaining \$160 by false pretences. He was committed for trial on May 3 and was released on \$1,000 bail.

He appeared before Mr. Justice Prendergast and was remanded until the October sitting of the court, as the Crown were unable to get the witnesses there in time.

On October 26, he appeared before Mr. Justice Prendergast and was remanded until sitting of court in December. The same reason being given that the Crown were unable to get witnesses in time.

Witnesses in this case are all over the country, some in Manitoba.

The facts of the case are that Pettypiece has been in the habit of locating homesteaders and charging so much for locating them on government lands. In Smith's case he charged him \$160, being one dollar per acre for a homestead that belonged to the government, and one that he had no right to deal with.

This has apparently been the scheme practiced for some time, and the government will produce other witnesses to prove that they also paid Pettypiece so much per acre for location on government lands.

It will lay a great many homesteaders liable to a criminal prosecution for perjury taking the affidavit that they had paid no one for the right to this homestead that they have entered for.

Rape, August Ludke.—On May 30, August Ludke was arrested on charge of rape in the town of Battleford, and was committed for trial. He was sent to Prince Albert jail for safe-keeping, and on October 26 appeared before Mr. Justice Prendergast

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and jury. This case was remanded to the sitting of the Supreme Court in December on account of the principal witness being too ill to attend. He was released on \$2,500 bail.

	Cases.	Convictions.	Dismissed.	Awaiting Trial.
Offences against the person —				
Attempted murder.....	1	1		
Assault.....	21	17	4	
Indecent assault.....	1		1	
Rape.....	1			1
Seduction.....	1	1		1
Wounding with intent, &c.....	2	2		
Assaulting peace officer.....	2		1	
Procuring defilement of woman.....	1		1	
Offences against property —				
Theft.....	13	3	6	4
Horse stealing.....	10	3	7	
Cattle stealing.....	1	1		
False pretences.....	7	2	4	1
Forgery.....	1		1	
Fraud.....	2	1	1	
Mischief.....	3		3	
Cruelty to animals.....	3	3		
Theft of trees.....	1	1		
House breaking.....	2		1	
Conspiring to steal.....	2		2	
Embezzlement.....	1		1	
Injuries to stock.....	3	2	1	
Wounding and killing cattle.....	2		1	1
Offences against public order—				
Unlawfully carrying offensive and concealed weapons.....	2	2		
Offences against religion and morals—				
Vagrancy.....	15	13	2	
Drunk, creating disturbance.....	143	142	1	
Frequenting house of ill-fame.....	2		2	
Defamatory libel.....	1	1		
Indecent act.....	3	3		
Corruption and disobedience—				
Escaping from custody.....	1	1		
Obstructing peace officer.....	1	1		
Resisting arrest.....	1	1		
Offences against the Indian Act—				
Supplying liquor to Indians.....	5	5		
Indians drunk.....	2	2		
Indians drunk on reserve.....	4	2	2	
Ordinances—				
Master and servants.....	5	4	1	
Game.....	3	3		
Prairie fire.....	8	7	1	
Illegal sale of liquor.....	2	2		
Insanity.....	5	5		
Pound.....	3	3		
Interdicted from use of liquor.....	6	6		
Liquor to interdicts.....	2	2		
Drunk while interdicted.....	18	18		
Gambling on licensed place.....	1	1		
Public health.....	1	1		
Breach of ferry ordinance.....	3	1	2	
Stray animals.....	4	3	1	
Charles II. Act.....	4	4		
Grand total.....	324	270	46	8

PRAIRIE FIRES.

Several prairie fires have occurred in the district during the year and seven convictions were secured. One was set by an Indian named Baptiste Kruger, for which he was awarded 20 days imprisonment.

Four cases were against the Canadian Northern Railway for engines setting prairie fires. These cases I believe will all be appealed on the grounds that the magistrates have no jurisdiction to try them, and that the service was irregular in serving the station agents in place of the engineers or firemen. Several smaller fires have also happened in the district, but owing to the large numbers of settlers passing to and

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fro, as well, as the freighters hauling supplies to the railway camps, it has been hard to find out who started them.

The majority of the cases have happened where the country is not as well settled. One can notice that as the country settles up the fires are not so dangerous as they were of old, on account of being stopped by so many trails and new breaking. I noticed that in travelling throughout the district that the majority of the settlers have ploughed round their hay stacks and farm buildings.

ASSISTANCE TO OTHER DEPARTMENTS.

INLAND REVENUE.

It was reported to me that one Roberge, a barber in the town, was using Sweet Caporal cigarette boxes that had been used, and filling them with a cheaper brand of cigarettes, and fixing on an inland revenue stamp.

The matter was reported to the department at Winnipeg and on their advice a search warrant was issued, and six packets were found in his shop. Dr. Barrett came up and interviewed Mr. Roberge, who pleaded guilty to using the stamps again. He was fined \$60 for the offence, which he paid. Where he made any profit I am unable to see.

GUARD-ROOM AND COMMON JAIL.

A high fence has been put at the back of the guard-room, making an inclosure which is used for an exercise yard for prisoners awaiting trial.

The guard-room has also been connected with the barrack-room with an electric bell.

The cells have frequently been found inadequate during the year, and frequently we have had to put two prisoners in one cell. Unless a jail is to be built here in the near future the guard-room should be enlarged.

A day room should also be built for the prisoners on account of the crowded condition of the place at times. It frequently happens that a witness and prisoner have to be confined in the guard-room, this especially in Indian cases, and owing to the smallness of the building it is almost impossible to keep them apart, so that they have no communication with one another.

Another great drawback is in the case of lunatics having to be kept here until the warrants arrive permitting them to be removed to the asylum.

Three lunatics have been confined here who have been noisy and have kept all the other prisoners awake at night by shouting and singing.

One man was committed here as a lunatic, but was released as harmless. He was subsequently arrested and sent here as a vagrant. This man died in the guard-room on July 20. The coroner did not consider it necessary to hold an inquest, and gave an order for his burial. I attach the provost's report.

BATTLEFORD, October 31, 1906.

The Officer Commanding 'C' Division,
Battleford.

SIR,—I have the honour to submit the annual report of 'C' Division guard-room for the year ending October 31, 1906.

Three were confined in the guard-room in the beginning of the year.

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The number confined during the year was 183, classified as follows:—

Males—

Whites.. . . .	111
Half-breeds.. . . .	48
Indians.. . . .	7
Lunatics (3 released), ...	6
Negroes.. . . .	1
Chinamen.. . . .	4
Syrians.. . . .	1
Poles.. . . .	1
	179

Females—

Half-breeds.. . . .	4
---------------------	---

The daily average was $6\frac{1}{2}$; the monthly average, 16; maximum, 12; minimum,

1.

Of the male prisoners, 12 were transferred to Prince Albert, 5 sent to other places. 13 awaiting trial were confined for an average of $34\frac{1}{2}$ days.

Released on bail, 3.

Awaiting trial, 1.

Sentenced for minor offences, with optional fines, which were paid, 85.

I have the honour to be, sir,

Your obedient servant,

D. SULLIVAN, Corporal,
Provost.

Agriculture.

Our assistance to this department comes under the heading of quarantine work. S.-Sergt. Meakings has been constantly employed during the year testing horses, and it was found necessary to employ Dr. Ovens for a time to try and get the work finished. S.-Sergt. Meakings is at present in the Round Valley testing horses for glanders in the railway camps, and reports that he has discovered a nest of this disease.

I have been informed by you that Dr. Hoggan, of Saskatoon, will take over the work of the railway camps. This means that I will be able to put S.-Sergt. Meakings to work in other parts of the district that requires his attention.

Customs.

During the year, duty has been collected from settlers who have brought in stock and been anxious to sell them. In one case a settler sold all his effects and went back to the States. Dues so collected were sent to the sub-collector at Saskatoon.

STATE OF INDIANS.

Is satisfactory, and this year I notice several are working with teams in the towns on the new buildings going up.

INDIAN DEPARTMENT.

The only place where the police attended the Indian treaty payment was at Onion Lake, S.-Sergt. Hall going with the Indian agent all round the various reserves in his district.

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DESTITUTION.

Very little relief has been issued during the year. One man was issued with relief at Goose Lake for four weeks. This man was a Belgian, and had small children, his wife working in one of the hotels, but not making enough to keep the family at home.

DISTRIBUTION.

Three new detachments have been opened during the year, viz.:—

Tramping Lake, 1 constable.

60-Mile bush, 1 constable.

Radisson, 1 constable.

The other detachments in the division are:—

Onion Lake, 1 s.-sergt.

Lloydminster, 1 corporal, 1 constable.

Wardenville, 1 constable.

Sounding Lake, 1 corporal, 2 constables.

Jackfish, 1 constable.

North Battleford, 1 constable.

Owing to the way in which the country is settling up, I think it would be advisable to reduce the strength of the Lloydminster detachment to one man, and place the other constable at Maidstone. In this way I consider that the district would be much better served.

Let the constable stationed at Lloydminster board his horse at the livery stable, then in the event of his being away on duty by train we are certain that his horse will be attended to.

	Superin- tendent.	In- spectors.	Staff Ser- geants.	Ser- geants.	Cor- porals.	Con- stables.	Specials.	Total.	Horses.
Battleford.....	*		1	2	1	3	4	13	11
Onion Lake.....	2		1					1	2
Lloydminster.....					1	1		2	3
Wardenville.....						1		1	1
Sounding Lake.....					1	2		3	4
Tramping Lake.....						1		1	1
60-Mile Bush.....						1		1	1
Radisson.....						1		1	1
Jackfish.....						1		1	1
North Battleford.....						1		1	1
Command.....		1	1		1	3		6	3
Total.....	2	1	3	2	4	15	4	31	29

* On leave, Supt. A. C. Macdonell, D.S.O.

DRILLS AND TRAINING.

During the winter lectures were given on police duties. All last winter and until the early part of the year the men were put through a course of drill in the gymnasium. Weekly parades have been held whenever possible, but it is extremely difficult to do this on account of so many of the men being constantly absent on police duty.

ARMS AND ACCOUTREMENTS.

The division has been armed with the Ross rifle and Colt's revolvers, equipment for same being received during the year.

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CONDUCT AND DISCIPLINE.

The conduct of the division has been good, with the exception of five constables being imprisoned during the year; drunkenness was the cause. One constable was dismissed.

HEALTH.

The health of the division has been good during the year. Two constables were confined in the hospital with measles. I am sorry to report that Inspector McGinnis died from Bright's disease.

HORSES.

I am sorry to say the wastage in horses has been large for such a small division. Two horses died.

Twelve horses were destroyed for glanders.

Fifteen horses were received from 'D' Division.

The total mileage for the year is 68,792.

RECREATION AND READING ROOM.

The recreation room is supplied with papers from Ottawa, and we have also a good library which is kept up by a monthly subscription from the men.

CLOTHING AND KIT.

Clothing received during the year has been of good quality and the kits in the division are practically all complete.

PROVISIONS.

The provisions are supplied by the Hudson's Bay Co. and are of good quality.

FORAGE.

Oats were supplied during the year by A. Speers; they were of good quality. The contract for hay in the barracks was completed early this year, the hay being of good quality.

GENERAL STORES.

General stores are purchased monthly.

GENERAL.

His Excellency the Governor General visited Battleford and was driven from North Battleford to Battleford where he visited the barracks and the Industrial School, and an address was presented to him at the Forrester's Hall on the 31st August.

The division was also inspected by the Assistant Commissioner during the year.

The increase in cases tried shows that the division has been pretty well employed during the year, and hardly a day went by that a constable was not required to investigate some minor complaint.

The detachments have been inspected every month it was possible to do so.

I have the honour to be, sir,

Your obedient servant,

JAMES MCGIBBON,
Supt., Commanding 'C' Division...

APPENDIX G.

ANNUAL REPORT OF INSPECTOR H. J. A. DAVIDSON, COMMANDING 'A'
DIVISION, MAPLE CREEK.

MAPLE CREEK, October 31, 1906.

The Commissioner,
R. N. W. Mounted Police,
Regina.

SIR,—I have the honour to render the annual report of 'A' Division for the year ending October 31, 1906.

GENERAL STATE OF THE DISTRICT.

The past year has been a favourable one both for farmers and stockmen. There was a plentiful fall of rain in the spring, and the crops turned out well, conditions have been favourable for stock and the grass is well cured, and the general outlook good for the coming winter. The flow of new settlers into this district has gone on steadily all summer.

CRIME.

From the attached summary of cases tried, crime would appear to somewhat on the decrease; but this year's report only covers 11 months instead of 12 as in former years. The number of thefts has fallen from 49 last year to 29, and vagrants from 53 to 21. This last is to be accounted for by the fact that the construction work on the Canadian Pacific Railway now being carried out in this neighbourhood offers employment to the class of men who usually swell the ranks of the unemployed.

The following are classified summaries of cases entered and disposed of during the past eleven months, being made out separately for each of the provinces of Alberta and Saskatchewan:—

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The following is a classified summary of cases entered and disposed of during the last 11 months in the province of Alberta:—

Crime.	Cases Entered.	Convictions.	Dismissed.	Withdrawn.	Awaiting Trial.	Undiscovered.	Warrants not Executed.
Offences against public order—							
Carrying pistol.....	2	1					1
Offences against administration of justice—							
Interfering with peace officer in execution of his duty....	3	3					
Offences against religion, morals, &c—							
Vagrancy.....	9	9					
Drunk and disorderly.....	55	54	1				
Keeping house of ill-fame.....	5	5					
Inmates.....	25	25					
Frequenters ".....	8	8					
Using insulting language.....	3	3					
Indecent exhibition.....	1	1					
Offences against the person—							
Carnally knowing imbecile.....	1			1			
Assault.....	19	16	1	2			
Offences against the property—							
Theft.....	18	6	6	3		2	1
Horsestealing.....	4		1				3
Cattlestealing.....	1				1		
Fraud.....	2		1				1
Mischief.....	3	1		1		1	
Forgery.....	2	1			1		
Arson.....	3				2	1	
Offences against Indian Act—							
Indians drunk.....	8	8					
Supplying liquor to Indians.....	3	3					
Offences against Railway Act—							
Stealing rides.....	4	4					
Offences against North-west ordinances—							
Drunk while interdicted.....	6	6					
Supplying liquor to interdicted person.....	1	1					
Selling liquor without license.....	3	3					
" " out of hours.....	1				1		
Prairie fire ordinance.....	2	2					
Masters and servants ordinance.....	4	3	1				
Game.....	1	1					
Estray animals ordinance.....	1	1					
Lunatics.....	3	2	1				
Other ordinances.....	5	4	1				
Miscellaneous.....	1	1					
	207	172	13	7	5	4	6

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The following is a classified summary of cases entered and disposed of during the last 11 months in the province of Saskatchewan:—

Crime.	Cases Entered.	Convictions.	Dismissed.	Withdrawn.	Awaiting Trial.	Undiscovered.	Warrants not Executed.
Offences against public order—							
Carrying pistol.....	1	1					
Offences against religion, morals, &c.—							
Vagrancy.....	8	8					
Drunk and disorderly.....	15	15					
Keeping house of ill-fame.....	1	1					
Inmates.....	3	3					
Frequenters.....	1	1					
Offences against the person—							
Assault.....	11	10	1				
Indecent assault.....	1	1					
Attempted suicide.....	1	1					
Offences against the property—							
Theft.....	11	4	1	1		4	1
Robbery and burglary.....	3				2	1	
Horsestealing.....	5	1	2		1	1	
Cattlestealing.....	1	1					
Fraud.....	2		2				
Mischief.....	4	1		2		1	
Forgery.....	1						1
Offences against Indian Act—							
Indians drunk.....	1	1					
Supplying liquor to Indians.....	1	1					
Offences against Customs Act—							
Evasion of customs.....	2	2					
Offences against Animals Contagious Diseases Act.....	2	1	1				
Offences against North-west ordinances—							
Drunk while interdicted.....	1	1					
Supplying liquor to interdicted person.....	2	1	1				
Master and servant.....	4	4					
Prairie fire ordinance.....	13	3	2		1	7	
Lunatics.....	2	2					
Miscellaneous.....	1	1					
Totals, Province Saskatchewan.....	98	64	11	3	4	14	2
Alberta.....	207	172	13	7	5	4	6
Grand total, Maple Creek District.....	305	236	24	10	9	18	8

SUMMARY of Criminal Cases Committed for Trial before the Supreme Court:—

In Alberta—

Committed for trial.. . . .	18
Number of convictions.. . . .	6
Number of acquittals.. . . .	8
Number awaiting trial.. . . .	4
Number sentenced to gaol.. . . .	1
Number sentenced to penitentiary.. . . .	2
Number released on suspended sentence.. . . .	3

In Saskatchewan—

Committed for trial.. . . .	12
Number of convictions.. . . .	7
Number of acquittals.. . . .	2
Number awaiting trial.. . . .	3
Number sentenced to gaol.. . . .	4
Number sentenced to penitentiary.. . . .	1
Number released on suspended sentence.. . . .	2

A breach of the animals quarantine regulations is the case of the Bloom Cattle Company, who sent their round-up party from their Canadian ranch near East End

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into Montana, and on their return were not content with simply bringing their Canadian cattle over with them, but also brought in five hundred head of their American cattle and thirty horses, without reporting at a quarantine station, their only excuse for this being that to have separated their American and Canadian cattle south of the line would have entailed the employment of more men and horses and thus increase the expense of the round-up. The company was convicted and fined.

PRAIRIE FIRES.

The country around Maple Creek has been singularly free from this scourge during the past year. Swift Current section has suffered more severely. In several cases it has been absolutely impossible to find any clue to the originator of these fires. One is known to have been caused by lightning, and there is at present in one case a charge to be brought against the Canadian Pacific Railway Company for a fire caused by one of their engines. Carelessness amongst the Mennonite settlers is, I understand the cause to which so many fires in Swift Current section is to be attributed.

GUARD-ROOM AND COMMON JAIL.

The guardroom at this post is very far behind the times as a gaol, being a very old building, cold in winter, and in summer it is infested with bed bugs, which no amount of insect powder will keep under control.

Number of prisoners confined December 1, 1905.. . . .	8
Number admitted during eleven months ended October 31.. . . .	66
Number discharged during eleven months ended October 31.. . . .	63
Number died during eleven months ended October 31.. . . .	1
In guardroom serving sentence October 31, 1906.. . . .	3
In guardroom awaiting trial October 31, 1906.. . . .	7

Eight prisoners were confined in the guardroom on December 1, 1905, and sixty-six were admitted, making a total of seventy-four prisoners confined during the year, classified under:—

Males—

Whites.. . . .	57
Half-breeds.. . . .	10
*Indians.. . . .	2
Chinamen.. . . .	1
Lunatics.. . . .	3

Females—

Indians.. . . .	1
-----------------	---

The daily average of prisoners was a fraction over nine. The average number admitted monthly was six, the maximum during September and the minimum during April.

One prisoner, Louis Ferris, serving a term of two months for vagrancy died in the guard-room from consumption on January 30, and was buried in the police cemetery.

ASSISTANCE TO DEPARTMENT OF AGRICULTURE.

Owing to the fact that there was no compulsory dipping this year, the assistance rendered by us to the Department of Agriculture has been extremely light as compared with last year. The quarantine inspection at Willow Creek has been attended to by one of our veterinary staff sergeants, and during the summer Staff Sergeant Busse has been stationed at Winnipeg on animal quarantine duty.

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Very little mange appears to be on the range, and any cases reported have been promptly attended to by a veterinary inspector.

Extensive and necessary repairs were made to the dipping plant at Willow Creek during the spring.

ASSISTANCE TO CUSTOMS DEPARTMENT.

We have not during the year been called upon to render any special assistance to this department.

Staff-sergeant Allen acts as sub-collector of customs at Willow Creek.

ASSISTANCE TO THE GOVERNMENTS OF THE PROVINCES OF ALBERTA AND SASKATCHEWAN.

As usual the greater part of the work done to assist the provincial governments has been in connection with the liquor license, the prairie fires and the insane persons ordinances.

INDIANS.

The non-treaty Indians living in the vicinity of Maple Creek are well-behaved and give no trouble. They are poorly off, but will not go on any reserve.

DISTRIBUTION OF STRENGTH.

The actual strength of the division now is thirty-seven of all ranks.

The distribution of the division on October 31, is shown on the following table:—

Place.	Inspectors.	Staff-Sergeants.	Sergeants.	Corporals.	Constables.	Special Constables.	Total.	HORSES.		
								Saddle.	Team.	Total.
Maple Creek.....	1	2	1	1	10	3	18	10	11	21
Medicine Hat.....	1		1		2		4	4		6
Swift Current.....				1	1		2	3	2	5
Town Station.....			1				1	1		1
Medicine Lodge.....				1	1		2	2	2	4
Ten Mile.....				1	1		2	2	2	4
Willow Creek.....		2				1	3	2	2	4
East End.....					2		2	2	2	4
Winnipeg.....		1					1			
Calgary.....					1		1	1		1
Discharged.....					1		1			
Totals.....	2	5	3	4	19	4	37	27	23	50

DRILLS, MUSKETRY, ARMS, ETC.

I am sorry to say that owing to our being so short-handed it was utterly impossible to carry out any drills in spring. Musketry practice was started; but discontinued by orders from headquarters. The whole division with the exception of four men were put through the prescribed course of pistol target practice.

CONDUCT AND DISCIPLINE.

The conduct and discipline of the division has been on the whole very good during the year. Four men were sentenced to be dismissed, but in the case of two of them the sentence of dismissal has been cancelled. One constable deserted from east end detachment on April 23.

HEALTH.

The health of the division has been excellent.

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DEATHS.

I regret to have to report the death of one member of the division Reg. No. 4119, Constable T. R. Jackson, who was accidentally drowned in Battle Creek on June 8, when it was in flood.

Constable Jackson was very popular with all his comrades. His body was not recovered for two days, and was buried in the police cemetery at Fort Walsh.

HORSES.

The division is on the whole well horsed; but there are several horses which on your next visit to Maple Creek, I would like to bring to your notice as being unfit for our work. No deaths have occurred amongst them. One remount was purchased by you on your visit here in June last. Two cast horses, Reg. Nos. 1735 and 2017 were sold by public auction during the year.

TRANSPORT.

Owing to our having no painter in the post, I found it impossible to have the transport painted this year. It is on the whole in good order.

SADDLERY.

Our saddles are in good order, and we have sufficient for our requirements.

HARNESS.

The harness is in good repair.

CANTEEN.

The canteen is on a good sound footing. A supply of articles required by members of the division is kept on hand, and it is a very great convenience.

STORES.

We have received 123 tons of excellent hay in stack here under contract at \$12.50 per ton. At Willow Creek 25 tons of hay is being supplied at \$12 per ton. At East End, 24 tons at \$10. At Ten-Mile the hay put up by the contractor was not up to the standard called for by the terms of the contract, and it has been rejected by a board of officers. At Swift Current we pay \$7.50 per ton, delivered as required.

At Maple Creek we have only succeeded in securing 350 bushels of oats on contract at 35 cents per bushel, which leaves a deficiency of 3,500 bushels to be supplied in some other manner. Swift Current, as at present arranged, will be supplied from here. At the other detachments we have obtained by contracts delivered on the spot; at Willow Creek, 15,000 lbs. at 75c. per bushel; at Ten-Mile, 10,000 lbs. at 42½c. per bushel.

The rations delivered under contract by the Hudson's Bay Company are satisfactory.

GENERAL.

Extensive alterations and repairs have been made in the main barrack building at this post. The two barrack-rooms, mess-room, kitchen, sergeants' mess-room and bath-room have all been replastered and painted. New ceilings were put in the mess-room, kitchen, &c. No. 1 barrack-room which was not used, has been converted into a canteen and recreation room. You kindly authorized a grant of \$150 from the fine fund for the furnishing of this room, and the necessary fittings have been ordered, and when they arrive we will be able to occupy the room. I think I may safely say that the barracks are more comfortable and more presentable than they have been for years past.

At Medicine Hat the building has been lately painted inside and out.

I have the honour to be, sir,
Your obedient servant,

H. J. A. DAVIDSON, *Inspector.*

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APPENDIX H.

ANNUAL REPORT OF INSPECTOR D. A. E. STRICKLAND, COMMANDING
'G' DIVISION, FORT SASKATCHEWAN.

FORT SASKATCHEWAN, ALTA., November 1, 1906.

The Commissioner, R.N.W.M. Police,
Regina, Sask.

SIR,—I have the honour to submit herewith my report of 'G' Division and district for 11 months ended October 31, 1906.

GENERAL STATE OF THE DISTRICT.

The R.N.W.M. Police district assigned to the supervision of 'G' Division extends from the Red Deer river north to the Athabasca Landing and from the eastern boundary of the province to the western line on the borders of British Columbia, a tremendous stretch of country when one considers the few men at my disposal.

During the past year the rush into this district has been beyond the expectations of the most optimistic; the magnitude of the increase being hard to realize. This rush has gone before the railways, spreading out all over the district, and I deem it safe to say that within another year, there will be no free lands left.

As we anticipated, there has been a large increase in the more serious crimes, which, of course, is natural with the influx of people from all over the world, and it has been our care during this most critical period, to be ever vigilant and maintain the reputation for law and order that is synonymous with the Northwest Territories, and the conviction is forced upon me, that never before were the Royal Northwest Mounted Police in more demand to safeguard the whole country, than they are now.

The great feature of this district, is its numerous resources. The richest soil, grains, timber, gold, gas, oil, coal, salt, fine rivers, and above all its most beautiful climate, mild and balmy, with plenty of sunshine, all go to entice the home-seeker, and, as soon as he sees the country, he makes up his mind to stay in Alberta with its high elevation and dry clear atmosphere, sunshiny days, cool nights, beautiful summers and mild winters when the balmy breath of the Chinook tempers it to almost summer warmth. In soil and climate, the opportunity for mixed farming is unsurpassed. The big ranch has never been a feature of this northern portion of Alberta. For the small, medium or large farmer there is the stock raising, consisting of cattle, horses, sheep and hogs. We have very few flies to pester them. The dairy should be, and is beginning to be, a large feature of every farm, for with the nutritious grasses and pure mountain-fed streams of water, there is nothing to deter.

On the agricultural side, there are the spring and winter varieties of wheat, oats, barley, flax and of hay, we have the timothy, alfalfa and bromus. Of vegetables, we have all the known kinds grown anywhere in a temperate climate. Small fruits of all varieties do well and the government proposes to establish a fruit farm at Wetaskiwin in the near future. Lands that were selling at less than \$5 an acre four years ago, are now bringing from \$12 to \$35.

The total number of immigrants, officially, are 21,500. Our arrivals are principally from the United States, where great numbers of farmers are selling out their farms and coming in here, where they take up a homestead and also buy what they

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require, where, for the amount he sold his farm for in the States, he can get double or triple for his money. The average farmer nowadays is looking to the future, and there is no greater opportunity offered by any country.

In speaking of the duties our men perform among these people, I have particularly noticed the respect and courtesy accorded our men by all the new arrivals. One Royal Northwest Mounted Police constable appears to have more prestige, and able to accomplish more among them, than half a dozen civilian constables.

Edmonton.—The capital of Alberta is our chief town, and bids fair to be one of the most progressive and largest cities of the west. The growth of this town for the last few years has been marvellous, both in building and population. This growth is more plainly set forth when we make comparison of the census of 1901, which was 2,652, and 1906, when the census showed a population of 11,534, a growth of nearly 9,000 in five years. Of course, all this development has occurred during the last two years, but, rapid as it has been, the town presents, under the circumstances, a good appearance. In the building line, one is struck by the number of very fine buildings all over the city, and more especially in the business district. Real estate has reached a very high figure in the heart of the city, where it is on record of \$1,000 per foot frontage being paid for a lot. Property suitable for residential purposes is also very high, and the city is plotted in lots for several miles each way. The new government buildings are to be erected upon the site of the old Hudson Bay post, a very fine site indeed in the west end, and commanding a splendid view from all sides. The surrounding country is well wooded and most suitable for residential purposes, and is therefore held very high in price. Rents are very high, and quite a number of people are living in tents because of their inability to secure dwellings. The town has also water, electric light and sewer connection, which is being extended all the time to meet the demand, which has been trebled in a very short time. It is proposed to have electric street railway facilities under municipal control, as is also the telephone. At the time of writing Edmonton has—

41 miles of plank sidewalk.

4½ miles granolithic sidewalk.

22 miles of sewers.

21 miles sewer mains.

16 miles graded streets.

550 telephones in operation.

And the experiment in municipal ownership has been very satisfactory. In site and climate, Edmonton is especially well favoured, there being nothing finer in Canada.

Strathcona, across the river from Edmonton, is a fine progressive town of some nearly 5,000 inhabitants, and growing by leaps and bounds. It is situated on the south side of the river, and will eventually be joined to Edmonton by one or more high-level bridges suitable for all kinds of traffic, and thereby making the two cities practically one. The advent of three great transcontinental railways into the vicinity, no doubt, has been the impetus, of course, never losing sight of the fact of the great natural resources of the country. The Canadian Pacific Railway runs into Strathcona and connects with Edmonton by a spur, but their \$1,000,000 high-level bridge will give them terminal facilities in Edmonton. The Canadian Northern Railway is already into Edmonton and steadily building westward. The Grand Trunk Pacific Railroad has been surveyed into the city, and will pass through Strathcona, entering by way of Clover Bar. The company will also build an immense high-level bridge, still further joining the interests of Edmonton and Strathcona.

Wetaskiwin, on the Canadian Pacific Railway, is a busy town and growing rapidly. There is also a branch line running east from there, tapping a new country that is

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rapidly filling up with settlers. Fine towns are springing up along this branch, and some of them, though not a year old, would be a credit as towns of years standing.

Fort Saskatchewan.—The old town does not appear to have received the impetus that all the other towns in this district have, yet withall, it is growing steadily, and many improvements are noted in the buildings and street work.

Vegreville is a town that one marvels at. Last October there was nothing there but the barren prairie, and it was in November, 1905, that the first lot was sold. Now there is a large thriving town of some 700 inhabitants. All the buildings and sidewalks new, and a 'go' about the people that bids fair to make it one of the finest towns in the province. This town boasts of everything a town should have in the way of hotels, stores, elevators, &c., besides a full array of professional gentlemen.

Vermilion is our farthest town east, and is one of the best towns on the Canadian Northern Railway line. It was started June, 1905. It is a divisional point of the railway and has a very fine station. This town also has a block of land laid out as a park, which promises in a few years to turn the present bare surroundings into a beautiful spot. The banks have very good buildings, especially the Bank of Commerce, which have both in Vermilion and Vegreville substantial buildings built in a pretty colonial design, adding a charm to the locality. There are several hotels, which are always full, making accommodation difficult to procure at times. There is also the usual array of other business and professions. This is going to be a very prosperous and well settled section within a short time.

The above mentioned towns are a few of the larger, but we can also point to some twenty smaller towns, all having the same aspect of newness and hustle apparent in the larger ones.

CRIME.

In the Edmonton district the record of crime for the eleven months ended 31st October, 1906, amounts to considerably more than it did for the twelve months of 1905. Below is a comparison for the last three years, showing considerable increase each year:—

	1904.	1905.	1906.
Cases entered.	426	461	502
Convictions.	315	335	371
Dismissed or withdrawn.	111	113	115
Waiting trial.	6	13	16

In the matter of serious crimes, that of murder still appears on our returns, besides crimes of horse-stealing, cattle-stealing, forgery, rape, incest, unnatural offences and bigamy. The convictions under the Indian Act have increased during the year. A large seizure of contraband liquor was made at Athabasca Landing, and the smuggler fined \$200 and costs. I would like to have done more in the detection of horse-stealing and cattle-stealing, but as you know the ramifications of an illicit deal in an animal are so frequent that it would keep two smart detectives busy on that alone. Of course, the constant patrolling and watchfulness of the district, and the resultant heavy sentences when caught, has proved a fairly effectual bar to the traffic. The new towns are continually crying out for police protection, which I endeavour to find, either a man stationed there or a regular patrol.

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The following table gives a classified summary of cases entered and convictions obtained in 'G' Division for the eleven months ended 31st October, 1906:—

Crime.	Cases Entered.	Convictions.	Dismissed, Withdrawn, not Tried.	Remarks.
Offences against the person—				
Murder.....	2		2	1 found insane
Poisoning.....	2		2	
Rape and attempted rape.....	7	1	5	1 waiting.
Attempted suicide.....	2	1		1 "
Aiding and abetting suicide.....	1	1		
Assault.....	81	63	18	
" indecent.....	3	1	2	
Stabbing and wounding.....	1		1	
Shooting.....	1		1	
Pointing firearms.....	1		1	
Threatening.....	2	1		
Intimidation.....	1	1	1	
Defamation of character.....	1	1	1	
Offences against the property—				
Theft.....	55	41	13	1 waiting.
" of registered mail.....	1			1 "
Horse-stealing.....	17	9	7	1 "
Cattle-stealing.....	3	2		1 "
Arson.....	2	1		1 "
Burglary.....	1	1		
Embezzlement.....	1			
Fraud.....	4		1	Sent to Calgary.
False pretenses.....	9	3	1	
Housebreaking.....	2	4	5	
Shopbreaking and theft.....	1		2	
Forgery.....	3			1 waiting.
Killing dog.....	2	1		2 "
Theft of dog.....	4	2	1	
Wounding cattle and horses.....	4	3		
Fraudulently selling cattle.....	1			1 "
Mischief.....	6	2		1 "
Fraudulently holding horses.....	1	1	4	
Cruelty to animals.....	3	3		
Breach of contract.....	1	1		
Offences against the public order—				
Carrying sling-shot.....	1	1		
Pointing loaded gun.....	1	1		
Offences against the administration of justice—				
Perjury.....	2		2	
Escaping from custody.....	2	1		1 "
Obstructing peace officer.....	2	2		
Offences against the religion and morals—				
Drunk and disorderly.....	86	78	8	
Vagrancy.....	13	13		
Bigamy.....	2		2	
Indecent exposure.....	3	3		
Gross indecency.....	2			2 "
Prostitution.....	1	1		
Keeping disorderly house.....	1	1		
Using obscene language.....	1		1	
Working on Sunday.....	4	4		
Obstructing highway.....	1		1	
Gambling.....	1	1		
Buggery and attempted buggery.....	3	2		1 "
Offences against the Indian Act—				
Selling liquor to Indians.....	17	16	1	
Liquor on reserve.....	3	2	1	
Drunk on reserve.....	14	6	8	
Liquor in possession.....	4	3	1	
Selling painkiller.....	1			
Giving liquor to Indians.....	2	2		
Offences against the Northwest ordinances—				
Masters and servants.....	26	20	6	
Drunk while interdicted.....	4	4		
Entire animal ordinance.....	1	1		
Estray ordinance.....	7	6	1	
Game ordinance.....	8	8		
Liquor ordinance.....	10	7	3	
Horse-breeders' ordinance.....	1			
Prairie fire ordinance.....	24	18	6	
Liquor in prohibited territory.....	4	4		
Insanity.....	23	18	5	
Harbouring vicious dog.....	1	1		
Mechanics' ordinance.....	1		1	
Total.....	503	371	116	16

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The number of cases committed for trial before the Supreme Court during the eleven months was 46, of these, the following is a summary:—

Convictions.	20
Dismissed.	10
Waiting trial.	16
Total.	46

Of the convictions, ten were sent to the penitentiary, nine to jail and one found insane.

PRAIRIE FIRES.

Owing to the great influx of settlers into a new country, the inevitable prairie or bush fire is bound to occur, and notwithstanding our great efforts to lessen this evil, quite a number of cases have been reported, but I am glad to say, that our work in this direction has availed so far, as to reduce to one-half the number of cases we had last year. Of course some of these were no doubt caused by sparks from the engines of the Canadian Pacific Railway and the Canadian Northern Railway trains, but unfortunately we did not make a conviction under the act, for the simple reason, we could not prove by a veritable eye-witness that the fire had been set out by an engine. These prairie fires are a source of great harm to the public as well to private property, and a small fire is hardly a deterrent, but to my mind, a large civil suit involving some thousands of dollars for damages, would no doubt prove a wholesale check provided the railway company was mulcted to the amount involved. With the average farmer or small rancher, I have noticed that in nearly every instance, rank carelessness has been the cause of fires getting away from them, and therefore when we prosecuted, we did so with the firm intention that this carelessness would be clearly shown to the magistrate who would accordingly inflict a fine, that would be a reminder of such negligence in the future. The work entailed on the post or detachment by these fires is very heavy at times, as men must ride and rouse the farmers out to assist in putting the fires out. From the time they go to a fire, there is no cessation of the work of subduing it. I firmly believe that if a moiety of the fine in all prairie fire cases was awarded the informant, the increased number of convictions would soon result in the lessening of the evil. At present, we find it hard to prove our cases; neighbours of the accused being naturally loth to appear as evidence against them.

ASSISTANCE TO OTHER DEPARTMENTS.

DEPARTMENT OF JUSTICE.

Fort Saskatchewan has the only common jail in this district, it being our guard-room. We have of course the administration practically of the criminal law, besides the work of escorting prisoners to and from the courts and to the jails and penitentiaries. Guards and escorts have been furnished, jail kept, orderlies detailed for Supreme Court sittings in the district, escorts for prisoners working gangs, and as we have to furnish numerous returns and reports, the clerical work is heavy. Ticket-of-leave men report to us, and we in turn notify the Commissioner of the Dominion Police to that effect. Reports required by the Department of Justice in connection with any prisoner, are also furnished by us.

DEPARTMENT OF AGRICULTURE.

Services in connection with the Department of Agriculture are very satisfactory, and though glanders has appeared in a number of different farms, the disease is

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certainly being stamped out. Black-quarter still prevails to a considerable extent, and the results of vaccination have not been altogether satisfactory, but this may be due to the inexperience of the persons vaccinating. One outbreak of mange appeared on a farm in the vicinity of Ponoka, but it was confined to this one farm. Influenza appeared among horses during the winter months, but it was not of a serious nature and occasioned very small loss.

CUSTOMS.

We have had very little work to do for this department this year, except the seizure of 105 horses for evasion of duty, from a man named Bain. This outfit was released on the payment of the duty, which amounted to some \$1,900.

INDIAN DEPARTMENT.

We have several Indian reserves in this district, but so close a watch has been kept on them, that quite a number of Indians have been brought before the magistrate for infractions of the Indian Act. They were liquor cases and the culprits either fined or imprisoned. The persons who furnished the liquor, were in nearly every instance, arrested and severely dealt with. There have been no serious crimes or improper dances among them this year. The Indians, I have always found, are more amenable to the law than the white men, and in all my experience as a magistrate, I have never known one of them, if released to procure a fine on a given date, to fail to turn up at the time set. If it were not for his appetite for liquor, the Indian would give no trouble whatever.

GUARD-ROOM AND COMMON JAIL.

Our guard-room at the fort, we find too small for the number of prisoners we have to keep. At the present time there are 32 prisoners, where we have accommodation for only 15, and of course we are driven to the necessity of putting two and three in a cell, which, on the face of it, as far as prison discipline is concerned, is a bad practice. Again, owing to the lack of sufficient men for duty in the post, prisoners escort has become a very arduous tour, especially when the escort is on guard the same night. It is very trying to keep awake for twenty-four hours and be on the alert the whole time, yet it has to be done under the circumstances.

I desire to call attention to the stockade around the jail yard. It is of poplar, old and rotten, and, as the prisoners exercise in this yard, it is altogether unsafe.

I would recommend that an addition of fourteen cells be built, at as small a cost as possible, to be used for short term prisoners. I would also ask that the stockade be renewed with plank, 12 feet high. Reg. No. 3493, Corporal Joyce, is the provost, and has performed those trying duties in a most satisfactory manner, having maintained perfect prison discipline.

The following is the acting provost report for the eleven months ended October 31, 1906 :—

FORT SASKATCHEWAN, ALTA., October 31, 1906.

The Officer Commanding,
 'G' Division, R.N.W.M. Police,
 Fort Saskatchewan.

SIR,—I have the honour to submit herewith the annual report of 'G' Division guard-room for the eleven months ended October 31, 1906.

Twenty-one prisoners were confined in the guard-room at the beginning of the year, and 128 were admitted, making a total of 149 prisoners confined during the year, classified as follows :—

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Males—

White.....	124
Half-breeds.....	12
Indians.....	4
Lunatics.....	8

Females—

White.....	1
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Total..... 149

The daily average of prisoners was 23.44. The average number of prisoners admitted per month was 11.63. The maximum during October, 32, and the minimum during July, 15.

Of the male prisoners, Ludwig Lilge, who was twice tried for murder, but was acquitted at the last trial, was rearrested on a charge of burglary, and duly tried and sentenced to five years in the penitentiary. Thirteen prisoners were sent to the penitentiary with an average sentence of three years and three months. Eight were lunatics, six of whom have been transferred to the Manitoba Asylum at Brandon, and two released as cured. The female prisoner confined here was Louise Mangleman, who was suspected of the murder of her husband. She was confined for forty-seven days and was acquitted at the preliminary hearing. Thirty-one male prisoners were awaiting trial for an average of seventy-three days, nine male prisoners were released, on bail. One prisoner, John Schultz, was released twenty-six days before the expiration of his term by order of the Department of Justice.

The health of the prisoners has been fairly good: three prisoners suffering from measles, rheumatism and pleuresy were confined in the hospital for an average period of twenty-six days.

Very few punishments have been inflicted for breaches of prison discipline.

The guard-room has been painted during the summer, both inside and outside and it is in good repair, except the flooring, which is in very poor condition.

The guard-room is very small considering the number of prisoners we handle, only being fitted with sixteen cells; this means that, at the present time, two prisoners are confined in every cell, and quite frequently when lunatics are in the guard-room, we are compelled to allow prisoners to sleep in the kitchen and corridor, which is very unsatisfactory.

The stockade at the rear of the guard-room is in very poor condition, the posts being quite rotten; it is by no means safe. I would beg to suggest that something be done to better the condition of the yard.

A great improvement has been made by converting the old police wash-room into a prison laundry and bath-room; cupboards have been fitted up in this building for keeping prisoners clothing in; this is decided improvement.

A fair amount of clothing has been supplied during the year, but as many prisoners are serving from six to twelve months, I beg to suggest that a proper prison uniform be supplied.

The attached table gives detail of prisoners who have served and who are at present serving sentences.

I have the honour to be, sir,

Your obedient servant,

M. A. JOYCE, Corporal,
Acting Provost.

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Crime.	Number.	AVERAGE TERM.	
		Months.	Days.
Assault.....	12	1	14
Cattle wounding.....	1	1	
Carrying concealed weapon.....	1	1	
Drunk and disorderly.....	13	1	11
Drunk while interdicted.....	4	1	
Indecent assault.....	1	6	
Indecent exposure.....	1	6	
Obtaining money by false pretenses.....	3	5	
Obtaining goods by false pretenses.....	1		20
Obstructing peace officer on duty.....	2	1	
Theft.....	27	2	27.5
Vagrancy.....	12	1	9.7
<i>Indian Act.</i>			
Drunk.....	3	1	
Drunk on reserve.....	1	1	
Supplying liquor to Indians.....	5	3	6

BARRACKS AND BUILDINGS.

The buildings in the barracks are in a very satisfactory state of repair, considering their age. Every care has been taken to promptly make any repairs that proved necessary. As this work has been performed by prisoners, only a small outlay has been required for material. Every building in the square received a coat of paint, but the appropriation was not large enough to cover the cost of painting the roofs. I hope, however, that this may be done next year as it is a badly needed improvement. A hydrant has been erected in the barrack square from which we can receive an unlimited supply of river water. In case of fire, the Canadian Northern Railway tank enables us to throw a stream of water to a height of 45 feet over every building in the reserve.

HORSES.

The general health of the horses of this division has been good throughout the year. Horse Reg. No. 2675 was destroyed on account of sub acute laminitis. Horse Reg. No. 2550 received a complicated fracture of a small bone in his pastern and had to be destroyed. Horse Reg. No. 82, having thrown his rider, was found dead in some bush some days after. Four horses were cast and sold during the year, and seven were transferred from Depot Division on the occasion of the visit of His Excellency the Governor General to Edmonton in August. The total number of horses in 'G' Division is forty two. The total mileage made by them during the year was 109,774, an average of about 2,600 miles for each horse.

PROVINCE OF ALBERTA.

The carrying out of the different ordinances, of a necessity entails a great deal of work on the post and various detachments. Of these, the stray animal, prairie fire, liquor, entire animal, horse breeders and game are the most important. All the moneys collected for fines for infractions of these ordinances, are forwarded to the Provincial Attorney General's department. In all cases of destitution, we at once communicate with the Department of Agriculture and means are at once used to alleviate the distress. The officers of the force, who are justices of the peace, try a great number of cases and take many of the preliminary examinations. We report to the proper department, anything radically wrong with roads or bridges which our men may notice while on patrol. We also act as fire and game guardians.

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STATE OF THE INDIANS.

The Indians in this district are very quiet and give us no trouble beyond the arrest of an occasional drunk. Reports from the different detachments near the reserves, show them to be comfortable, well fed and clothed. There has been no epidemic of any kind among them this year.

DISTRIBUTION.

The actual strength of the division now is forty-seven of all ranks. With Fort Saskatchewan as headquarters, we have sixteen detachments out as the following summary shows.

I would recommend the following changes:—St. Albert detachment be moved to Mornimville and Hurry detachment to be withdrawn. A constable being stationed at the latter place during prairie fire season only. Ponoka detachment was temporarily closed last year owing to shortage of men, but I found it necessary to reopen it, on account of the numerous reports and complaints made in regard to the supplying of liquor to Indians of the Ermine Skin, Bobtail and Sampson reserves. I am glad to say that the numerous convictions recorded, crime reports on which have been sent you, have resulted in putting an end to this sort of thing. Daysland, on the extension of the Canadian Pacific Railway east of Wetaskiwin, has also been opened and is a very important detachment. A constable is also stationed at Vermilion now, a divisional point of the Canadian Northern Railway 100 miles east of Fort Saskatchewan.

The following is the distribution state of 'G' Division:—

Station.	Inspectors.	Staff Sergeants.	Sergeants.	Corporals.	Constables.	Special Constables.	Total.	Horses.			Total.
								Saddle.	Team.	Ponies.	
Fort Saskatchewan.....	2	3		3	11	2	21	9	10	1	20
Edmonton.....	1			1	2	2	6	4	2		6
St. Albert.....				1			1	1			1
Lac Ste. Anne.....					1		1	1			1
Wetaskiwin.....			1				1			1	1
Camrose.....					1		1	1			1
Daysland.....					1		1	1			1
Sedgewick.....				1			1	1			1
Ponoka.....					1		1	1			1
Alix.....					2		2	1			1
Stettler.....					1		1	1			1
Athabasca Landing.....				1			1	1			1
Andrew.....					1		1	1			1
Saddle Lake.....					1		1			1	1
Vermilion.....					1		1	1			1
Vegreville.....					1		1	1			1
Hurry.....			1		1		2	1			1
On command.....					2		2				
On furlough.....					2		2				
	3	3	2	7	28	4	47	27	12	3	42

DRILL, TRAINING, MUSKETRY, ARMS, ETC., ETC.

Having so many detachments in the district whose time was principally taken up in police work and frequent patrols, rendered absolutely necessary by the rush of settlement, together with the very large number of prisoners to look after, made the matter of drill and the proper training of the men a difficult proposition, but never the less, a fair amount of both was done. The inspecting officers always make it a point to refresh the men's knowledge in this respect when going their rounds, and every opportunity is taken at headquarters. At different times it was necessary to call the men in from the detachments to form mounted escorts. Inspector Walke was in

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command of the mounted escorts for His Honour the Lieutenant Governor for the opening and closing of the first legislature of the province of Alberta. He also took command of the escort formed for His Royal Highness Prince Arthur of Connaught during his visit to this district. Inspector Worsley acted as A.D.C. on both these occasions.

Rifle practice at the butts was impossible this year owing to the fact that our old rifle range was cut in two and occupied by the construction of the Canadian Northern Railway. We, however, accomplished our annual revolver practice, the returns of which were forwarded to you at headquarters. We had a difficulty with the revolver cartridges, making many misfires; this defect has been remedied by a change of cartridges.

CONDUCT AND DISCIPLINE.

I am glad to report that the conduct of this division, for the year has been exceptionally good. The few sentences entered, are for minor offences and against the younger members of the division who had hardly sufficient experience of discipline to keep them from committing themselves by their thoughtlessness.

HEALTH.

The health of the members of 'G' Division throughout the year has been good, and although there has been a considerable number of infectious and contagious diseases in the neighbourhood, we have up to the present, escaped it. The water in our well was analysed this year and pronounced pure, which is a fortunate thing for us. Being below the city, it was impossible to use the river water owing to contamination from the sewers emptying into it. The sanitary arrangements are as good as we can make them, and are carefully attended to. The doctor reports regularly.

CANTEEN.

The canteen at this post has done very well in its small way, for as we have very few men to patronize it, extreme care must be taken in its management.

READING AND RECREATION ROOM.

The reading room is supplied from Ottawa with the principal illustrated papers, also leading weeklies and dailies.

The library consists of some 400 books of fiction, &c., and is supported by monthly subscription by the members of the division who wish it.

STORES.

Clothing and kit as received during the year has been very serviceable and the supply has been kept up very well. The uniform has been altered by the tailor to satisfaction. The tailor is also our interpreter in German and Galician.

GENERAL STORES.

General stores are only purchased when required, locally, so there is hardly any stock on hand. The contracts have been filled very satisfactorily.

TRANSPORT, HARNESS AND SADDLERY.

The transport on charge in this division is in good repair. In regard to harness and saddlery we are well supplied, almost new and in good repair.

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GENERAL.

As will readily be seen by the crime reports forwarded to you during the preceding eleven months a great deal of work has been performed by the members of this division. Crime is steadily on the increase, but when account is taken of the number of immigrants who have settled in this northern part of Alberta during the year, this cannot be wondered at. Our men have large districts to patrol and I have no hesitation in saying that I consider they have done their duty well.

It is extremely gratifying to read the complimentary remarks made by travellers from all over the world on the law and order maintained by our men.

The absence of Inspector Walke during the summer months in charge of the Lake Winnipeg patrol, was greatly felt on account of the extra work, magisterial and otherwise, which therefore fell to our share, and we found it extremely difficult during the year to keep up to date with the crime reports and other returns.

It is very gratifying to mention the amicable relations existing between ourselves and the members of the provincial government of Alberta. We have been assisted by them in every way.

In conclusion I have much pleasure in acknowledging the hearty support received by me from all ranks in carrying out the various duties during the past year.

I have the honour to be, sir,

Your obedient servant,

D. A. E. STRICKLAND, Insptr.

Commanding 'G' Division, Fort Saskatchewan.

APPENDIX J.

ANNUAL REPORT OF SURGEON G. P. BELL, M.D., REGINA.

REGINA, November 26, 1906.

The Commissioner,

R.N.W.M. Police,
Regina.

SIR,—I have the honour to submit the annual medical report of the force outside Yukon Territory, for the eleven months ending October 31, 1906.

The number of cases treated was 906, which compared with last year shows a decrease of 179, largely due to the annual reports being made up a month earlier than usual. The deaths numbered 4, a reduction of one on the previous year. The average number constantly sick was 16.03, which was less by 2.92 than last year. The average sick time to each man was 10.73 days, which is less than in 1905 by 1.11 days. The average duration of each case of sickness, 6.45 days, is higher than in the previous year by .06 days:

General Diseases.—Eruptive fevers were represented by five cases of measles, and one of chicken-pox. There were 41 cases of influenza and 2 of diphtheria. Enteric fever furnished 2 cases and dysentery accounted for 6 cases.

Of malarial fevers there were 2 cases of ague, both imported.

Septic diseases furnished 1 case of erysipelas.

Gonorrhœa caused 10 admissions. There were 9 cases of parasitic disease, comprising 3 cases of scabies, 2 of ringworm, 2 of pedicute, and 2 of worms.

Rheumatism furnished 36 cases, but there was no case of rheumatic fever. There were 2 cases of debility and of other general diseases there was 1 case of mumps.

Local diseases.—For diseases of the nervous system there were 39 admissions, which included one each of impaired memory, mental debility, melancholia, and in-

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somnia, fourteen of neuralgia, one of epilepsy, two of nervousness, fifteen of headache, vertigo two, and convulsions one, the last named ending fatally.

Diseases of the eye.—There were 22 cases, conjunctivitis furnished fifteen cases, corneal ulcer one, and defective vision three.

Diseases of other organs of special sense numbered 17 cases, of which seven were aural, and ten nasal.

Diseases of the circulatory system.—There were 6 cases, all of varix.

Diseases of the respiratory system.—There were 191 cases, consisting largely of coughs and colds. There were 15 cases of bronchitis, two of laryngitis, and one each of pneumonia, pleurisy, namoptysis and hay fever.

Diseases of the digestive system.—There were 261 cases. Among these were 93 affections of the mouth and throat, 18 of colic, 44 of diarrhœa, 5 appendicitis, 25 of indigestion, 1 of hernia, 35 of biliousness, and 3 of hepatic disorder.

Diseases of the sympathetic system furnished 4 cases. All were due to inflammation or suppuration of the sympathetic glands.

Diseases of the urinary system gave 2 cases, one of nephritis and one of Bright's disease, the latter proving fatal.

Diseases of the generative system were 7 in number, consisting of 3 cases of varicocele, 1 of orchitis, 2 of urethral stricture, and 1 of balanitis.

Diseases of the organs of locomotion.—There were 3 cases of synovitis, and 2 of nyalgia.

Diseases of the connective tissue gave 14 cases, and

Diseases of the skin accounted for 51 cases, the principal causes being boils 23 cases, ulcers 4, eczema 14, and herpizoster 1.

Injuries.—Of general injuries 1 death is recorded from accidental drowning. There were 165 cases of local injuries, mostly due to wounds, sprains, contusions, and abrasions. There were 3 dislocations, one each of the shoulder, toe, and thumb, and 13 fractures, among which 4 were of both tibia and fibula, 1 of the ankle, 1 of the numerus, and 1 of the hip-joint. There were 1 fatal case of gunshot wound (suicidal) and 1 accidental, which, however, was not of a serious character.

Invaliding.—There were 9 men invalided, the causes being chronic bronchitis 1, epilepsy 1, defective vision 2, mental debility 1, old fracture 1, nervousness 1, melancholia 1, and varicose veins 1.

Surgical operations.—These included operations for appendicitis 2, for hernia 1, and for varix 1. Recovery resulted in all.

Recruiting.—Of 86 recruits medically inspected, 28 were rejected as unfit. The chief causes of rejection being defective development (under height, weight and chest measurement), and defective vision.

SANITARY CONDITIONS.

Reports from the several divisions show that the sanitary condition of the barracks is satisfactory. The general health has been good, and few serious cases of illness have occurred in the families of members of the force. A board having recently been held upon the condition of the barrack buildings at Regina, it is unnecessary to refer to improvements which are expected to be commenced at an early date. Increased latrine and ablution accommodation are required at Regina.

A table is attached showing the principal statistics of sickness and mortality according to the various sections of disease.

I have the honour to be, sir,

Your obedient servant,

G. P. BELL,

Surgeon.

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TABLE showing the Average Annual Strength, Number of Cases, Deaths, Invalided, and Constantly Sick of the Force, outside Yukon Territory, for the year ending October 31, 1906, with ratio per 1,000 of the strength.

AVERAGE ANNUAL STRENGTH, 545.	No. of		In-	Con-	RATIO PER 1,000.			
	Cases.	Deaths.	valided.	stantly Sick.	No. of	Deaths.	In-	Con-
Disease.					Cases.		valided.	stantly Sick.
General Diseases.								
Eruptive fevers.....	6			.20	11.00			.36
Influenza.....	41			.47	75.22			.86
Diphtheria.....	2			.14	3.66			.25
Enteric fever.....	2			.35	3.66			.64
Dysentery.....	6			.04	11.00			.07
Malarial fevers.....	2			.04	3.66			.07
Septic diseases.....	1			.03	1.83			.05
Gonorrhoea.....	10			.67	18.53			1.22
Parasitic diseases.....	9			.26	16.51			.47
Rheumatism.....	36			.89	66.05			1.63
Debility.....	2			.12	3.66			.22
Other general diseases.....	1			.02	1.83			.03
Local Diseases.								
Diseases of the—								
Nervous system.....	39	1	4	.59	71.19	1.83	7.33	1.08
Eye.....	22		2	.46	40.36		3.66	.84
Other organs of special sense.....	17			.14	31.19			.25
Circulatory system.....	6		1	.35	11.00		1.83	.64
Respiratory system.....	191		1	2.13	350.45		1.83	3.90
Digestive system.....	261			2.37	480.73			4.34
Lymphatic system.....	4			.35	7.33			.64
Urinary system.....	2	1		.26	3.66	1.83		.47
Generative system.....	7			.05	12.84			.09
Organs of locomotion.....	5			.14	9.17			.25
Connective tissue.....	14			.33	25.68			.60
Skin.....	51			.68	93.57			1.24
Injuries.								
General and local.....	169	2	1	4.95	310.09	3.66	1.83	9.08
General total.....	906	4	9	16.03	1663.87	7.32	16.48	29.29

APPENDIX K.

ANNUAL REPORT OF VETERINARY SURGEON J. F. BURNETT, V.S.

REGINA, November 23, 1906.

The Commissioner,
R. N. W. M. Police,
Regina.

SIR,—I have the honour to submit herewith my annual report for the year ending October 31, 1906.

The year just closed has been a particularly hard one for the horses of the force. The tremendous influx of new settlers, a good many of whom have gone into outlying districts, and the unprecedented mileage of railway construction throughout the new provinces, has necessitated an increased mileage for our horses; and while the horses have stood the extra work well, the effects of it are plainly noticeable, in some few instances painfully so, some good, well seasoned horses having been reduced to mere skeletons in the course of a few months with the work they have had to do on

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some of the detachments, making continual changes of horses absolutely necessary. A hard summer's work does not appreciably affect a fully matured, well seasoned animal, as it only means the loss of flesh which can soon be restored, but with young horses the result is different, as they often receive injuries such as sprain of the tendons, or ligaments of the fetlocks (usually caused when a horse is tired), or a slight inflammation of the sensitive structures of the feet, and from such mishaps they never fully recover. Very often a man on detachment will start out in the morning with the intention of making a fifteen or twenty mile patrol; during the day some matter is brought to his notice that requires immediate attention, and at night he finds that he has travelled fifty or sixty miles instead of the fifteen or twenty. To the fully matured and seasoned horse the extra mileage does not make much difference if he has been used in a careful manner, but to the young green animal it means that his strength has been overtaxed, and the result is a setback if nothing more serious.

Sixty-one remounts were purchased during the year, all good serviceable animals, and as they were badly needed they were at once put to hard work, it being impossible to give them any preparation for the work they would have to perform.

Horses suitable for our work are gradually growing scarcer, there being quite a demand for the class we purchase, the majority of farmers keeping one or two light horses for driving, while a large number are used for livery purposes and light delivery rigs, and a great many are used for work which should be done by heavy horses, the price, however, of the latter precluding their purchase by many. (There is a growing demand for light drivers, which is met by importations from the east, trotting bred horses being most favoured. Numerous inquiries are heard for fancy draught teams, well matched dapple greys the class most wanted.)

It was found necessary to destroy no less than 18 horses this year on account of glanders, 12 at Battleford, 1 at Regina and 5 at Yorkton, the last contracted the disease in a livery stable at Kamsack, but where the Battleford horses became infected is not known. The one case in Regina was known as a ceased reactor, it having been tested about three years ago. When last tested the reaction to the mallein was so well marked that it was considered not advisable to take any further risks, and slaughter was therefore ordered. All of the horses of 'C' Division were submitted to the test, and the premises thoroughly cleansed and disinfected, so that we may be reasonably certain that the disease no longer exists among the horses in 'C' Division stables. All of the horses on detachment in the Yorkton district were also submitted to the mallein test, and every precaution taken to prevent further spread of the disease from that source. Of course, an outbreak of glanders may occur at any time and place, so many infected animals having been brought in from the other side by settlers and taken to all parts of the country, and a man is very apt to put his horse in a stall in some of the feed stables that has just been vacated by an infected animal.

I would again point out the advisability of starting a breeding farm, where suitable horses for our use could be raised, something of the kind is badly needed, not alone for our benefit, but as a help to the horse raisers of the country. A great amount of money need not be spent on a farm of this kind. Twenty-five thousand dollars would, if carefully expended, be sufficient to stock the place and pay for necessary buildings, fencing, &c. This in a few years would be a very valuable asset.

The stabling at the different posts which I have visited during the year, with the exception of those at Calgary and Maple Creek, I have found fairly comfortable, none of them modern by any means, but answer our purpose. I would recommend the building of new stables at the two points mentioned.

In some of the large eastern stables the grooming is done by machinery, a revolving brush driven by a small gasoline engine being the power used. While I have never seen one of the machines at work, I have heard them spoken of very highly, both for the work performed and the saving in labour. I consider this a matter well worth looking into.

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The shoeing throughout the force has been satisfactory where our own men are employed and can be looked after by our own veterinary staff, but where we must rely upon outside blacksmiths a good deal of the work is pretty crude, and I regret to say that I can see no way of bettering conditions.

The oats and hay delivered throughout the force have been fully up to the average. There is, of course, more or less variation in every district each year. For instance, the oats in the Regina district, though good, are not so plump or as good coloured as those delivered last year; while at Battleford they never got as good hay as has been put up at the post this year.

The drugs (now purchased locally) supplied have been invariably of good quality. A list of cases treated during the year is herewith attached.

I have the honour to be, sir,
Your obedient servant,

JNO. F. BURNETT, Insp.,
Veterinary Surgeon.

List of cases treated during the year.

Digestive system.....	29
Respiratory system.....	22
Circulatory system.....	1
Nervous system.....	1
Osseous system.....	16
Muscular system.....	68
Tegumentary system.....	17
Plantar system.....	52
Glandular.....	1
Contagious (destroyed).....	18
Wounds.....	..
Incised.....	8
Lacerated.....	23
Punctured.....	18
Contused.....	48

CAST HORSES.

Reg. No.	Div.	Place.	Date of Sale.	Amount Realized.
1934	D	Macleod.	Dec. 23, 1905.	\$ 31.00
1995	D	"	" 23, 1905.	51.00
2126	D	"	" 23, 1905.	31.00
2144	D	"	" 23, 1905.	60.00
2203	D	"	" 23, 1905.	41.00
2254	D	"	" 23, 1905.	37.00
2528	D	"	" 23, 1905.	53.00
2012	Dep.	Yorkton.....	" 9, 1905.	20.00
2873	G	Fort Saskatchewan.	Feb. 17, 1906.	79.00
2823	G	"	" 17, 1906.	71.00
2837	G	"	" 17, 1906.	66.00
P 39	G	"	" 17, 1906.	31.00
P 166	N	Lesser Slave Lake.....	May 1, 1906.	20.00
154	E	Calgary.	April 26, 1906.	115.00
2500	D	Macleod.	July 21, 1906.	35.00
1735	A	Maple Creek.....	Aug. 18, 1906.	60.00
2017	A	"	Sept. 8, 1906.	24.00
107	D	Macleod.	" 15, 1906.	35.00
P P 16	D	"	" 15, 1906.	11.00
107	N	Lesser Slave Lake.....	Dec. 1, 1905.	20.00

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DEATHS.

Reg. No.	Div.	Place.	Date of Death.	Disease.	G. O.
144	N	Fort St. John.	Jan. 31, 1906.	Pneumonia.	118
19	N	"	" 30, 1906.	"	1171
11	N	"	" 27, 1906.	"	1171
70	C	Battleford.	Mar. 26, 1906.	Self-inflicted injuries.	1236
54	N	"	Dec. 12, 1905.	"	1237
206	N	"	Feb. 2, 1906.	"	1237
35	N	"	Dec. 12, 1905.	"	1237
2833	Dep.	Regina.	May 3, 1906.	Broken neck.	1257
2558	E	Calgary.	April 25, 1906.	Blood poisoning.	1270
21	N	Fort St. John.	May 11, 1906.	Debility.	1402
36	N	"	Dec. 10, 1905.	Missing, cause unknown.	1402
63	N	"	April 20, 1906.	Debility.	1402
41	N	"	Mar. 22, 1906.	Cause unknown.	1402
82	G	Fort Saskatchewan.	May 10, 1906.	Accident.	1403
2819	F	Duck Lake.	June 2, 1906.	Internal hemorrhage.	1580
132	Dep.	Regina.	Aug. 26, 1906.	Injury to spine.	1585
65	N	Deep Creek.	June 30, 1906.	Debility.	1700
145	N	Ospika River.	July 26, 1906.	Debility.	"
2742	C	Battleford.	Oct. 21, 1906.	Aneurism of the posterior aorta.	1719

HORSES DESTROYED.

Reg. No.	Div.	Place.	What Destroyed for.	Date.	G. O.
2766	C	Battleford.	Glanders.	Feb. 12, 1906.	1120
2726	C	"	"	" 12, 1906.	1120
2608	C	"	"	" 13, 1906.	1120
125	C	"	"	" 14, 1906.	1120
2537	Dep.	Regina.	"	Mar. 5, 1906.	1129
2621	C	Battleford.	"	Feb. 21, 1906.	1144
2078	C	"	"	" 24, 1906.	1144
2611	C	"	"	" 26, 1906.	1144
2798	C	"	"	" 26, 1906.	1144
2802	C	"	"	" 26, 1906.	1144
2675	G	Fort Saskatchewan.	Sub. Acute laminitis.	Jan. 25, 1906.	1154
2550	G	"	Comp. fracture os corona.	Mar. 3, 1906.	1185
2671	C	Battleford.	Glanders.	April 11, 1906.	1272
122	C	"	"	" 11, 1906.	1272
2757	Dep.	Yorkton.	"	" 5, 1906.	1288
2530	"	"	"	May 2, 1906.	1288
2542	"	"	"	" 2, 1906.	1288
2830	"	"	"	Mar. 20, 1906.	1288
2610	"	"	"	" 24, 1906.	1288
2911	E	Calgary.	Fracture.	Sept. 8, 1906.	1702
127	C	Battleford.	Glanders.	Feb. 8, 1906.	"

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HORSES PURCHASED.

From whom.	Address.	Number.
J. Larose	Edmonton	10
F. Groat		4
B. Newbolt	Calgary	2
J. Poisier .....	.....	1
Michael Marley	Mosley	1
T. Howard	Okotoks	1
Herbert Millar	Pekisko	7
A. E. Hunter	Meadow Creek	1
J. G. Brown	Kootenai	1
H. G. Lang	Stand Off	1
W. Furman	Meadow Creek	1
W. M. Hardy	Pincher Creek	1
A. H. Kroesing	Dry Fork	1
H. Riviere	Pincher Creek	1
J. W. Schurtz	Mountain Mill	1
H. Riviere	Pincher Creek	2
H. C. Glasgow	Twin Butte	2
D. Warnock	Pincher Creek	1
H. H. Jenkins .....	.....	1
R. S. Smith	Capelsburg	1
Frank Pedigo .....	.....	1
Frank Tatham	Maplewood	1
D. F. Johnston .....	.....	1
J. McNab	Side Out	3
Chas. McCarty	Skidbreen	1
Herbert Millar	Pekisko	13

APPENDIX L.

REPORT OF SUPERINTENDENT J. D. MOODIE, OF VOYAGE FROM HALIFAX TO CHURCHILL, HUDSON BAY.

SS. 'ADVENTURE,' PORT BURWELL, August 11, 1906.

The Comptroller,
R.N.W.M. Police,
Ottawa.

SIR,—I have the honour to report that the ss. *Adventure* left Halifax on August 1, at 10 a.m., with all supplies on board except gun powder which did not arrive before we were ready to sail.

She commenced loading on the morning of July 30, the agent not being able to obtain men to do so on Saturday. The cargo was ready and no delay was occasioned on the part of the police.

North Sydney was reached at 10.30 a.m., on August 2, and coaling was completed about midnight. We sailed at 6.30 a.m., the next day.

The fourth was fine but on the fifth thick fog was encountered and we were going slow nearly all day.

Monday the 6th was fine. Some large bergs passed. About 10 p.m. weather thickened and at midnight ice was met, and at 4 a.m., we were going half speed. On the 7th, we were in ice until noon and weather was very thick. Worked in towards land and got abreast of Cap. Mirford at 1 p.m., nice and clear, and ice not so close packed. Towards evening came on to blow hard from north-east closing the ice in on the land. We were then nearly up to Hebrun. With every indication of a bad night with fog and a lee shore the captain decided to put into Hebrun which we reached at 7 p.m.

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Wednesday the 8th, there was dense fog all day and the ice was packed tight on shore. The morning of the 9th was the same but at noon the fog lifted, and we left at 12.30 p.m. During the night the wind had changed and driven the ice off shore.

We had a good run to Cape Chidleigh. Going along the shore but little ice was encountered. Port Burwell was reached at 10.30 a.m., on August 10.

The Moravian Mission steamer *Harmony* was here unloading supplies and lumber for a church and another dwelling house for the missionary. She reported great difficulty in making Burwell on account of the ice, but states that she could have gone into the straits without any difficulty.

When we arrived the inner harbour was jammed with ice and two large bergs aground in outer harbour. The coal had to be landed on the north side of a small cove to the east of the station. I inclose a rough sketch of the harbour showing the cove where the coal is, as a guide to the *Rouville*.

The *Arctic* was not sighted by us and we have received no news of her.

The small launch purchased in New York has proved of the greatest service and does her work well, towing with ease two loaded boats. I would suggest that the electrician of the *Rouville* makes himself thoroughly acquainted with the mechanism and working of the gasoline launch purchased in Toronto as we have had a good deal of trouble with her. She ran splendidly on her trial in Halifax when in the hands of an expert.

About thirty-five tons of coal have been landed at Burwell and this should be ample for the *Rouville*. If we landed more it would mean that we had to remain here until Monday night at least and we cannot afford the time. The ice in the harbour makes landing very slow.

Interpreter Lane reports a long and hard winter and late spring, although the straits were open about the end of June. Last year the straits were open for navigation until November 23. The Moravian clergyman here reports the same thing.

All are well on board and very comfortable. The *Adventure* is a fine vessel and very steady.

I would suggest that a further supply of spare batteries for the launches be sent up next year by the *Rouville*.

I am taking advantage of the *Harmony* returning to St. Johns in about three weeks to forward this short report just to keep you posted as much as possible as to our whereabouts. I got some extra hay at Sydney to feed the stock until the weather was cold enough to kill them and preserve the meat. By mistake the suppliers sent down two tons hay instead of one as ordered, but if not used it can be kept and will come in useful if ponies are taken to Churchill next year, as I hope will be the case.

Full reports will be sent home by the *Adventure* when returning.

I have the honour to be, sir,

Your obedient servant,

J. D. MOODIE,
Superintendent.

P.S.—I would bring to your notice the way in which S. M. Dee performed his duties in Halifax. He had hard and almost continuous work checking the goods as received at the wharf, and the work could not have been done better.

CHURCHILL, HUDSON BAY, September 30, 1906.

The Comptroller,

R.N.W.M. Police,
Ottawa.

SIR.—I have the honour to report that we arrived at Fullerton on August 18, and immediately commenced landing supplies. We succeeded in obtaining the assistance of a good number of natives with several boats and made good progress. The weather

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was rather against us, and but for the harbour being completely landlocked the work could not have progressed as well. Knowing the nature of Chesterfield inlet and bearing in mind that there would be no men there this winter to look after the supplies, on consultation with Captain Couch and Captain Bartlett, I decided to land the Chesterfield inlet supplies at Fullerton including coal. For coaling the *Rouville* Fullerton will be more convenient than Chesterfield as she can get close up to the rocks where the coal is lying. This decision has turned out to be most fortunate as had we spent time in going to Chesterfield even the whole of the lumber and supplies would not have been landed at Churchill. At the latter place there were no natives to be had. Mr. Boucher in charge here told me that he had hurried them away purposely when he heard that we were coming so that we should not detain them helping to unload the vessel. Had these natives been here all the cargo would have been landed long ago. One of our boats was also away and both of the boats belonging to the company. The crew of the steamer should have been much stronger so that there could have been one gang loading the boats and another discharging at the same time.

Launch.—Both of these gave satisfaction but require a person fully instructed in the working to run them. We had a great deal of trouble with the large one for some time and it was not until I had offered \$50 to any one who could work her and keep her working that the engineers got her going. I have written Messrs. Harvey asking them to pay this amount to the second engineer and charge it to the police. After this the launch gave no trouble and is a fine boat and powerful.

Site of barracks.—A fine site has been got a little over a mile up the river from old Prince of Wales fort.

Coal.—As before reported the bags are poor and the sewing the same. There will be a considerable loss in the weight. Such bags should not have been received. Nearly the whole of that landed will have to be put in new sacks of which we have some 500 or 600, before it can be put on the *Rouville*.

Squatters.—A large number of claims have been staked out along the river, but a Mr. Beech is the only one living here. One man, he was born up here, is living about a mile from the barracks. He, I presume, will be allowed to retain a small piece of land although inside the government reserve.

Whale boat.—Some of the police, engine-room staff and crew came on board the steamer one night at Fullerton in a native boat and it was not made fast properly and went adrift during the night. A strong off-shore wind and ebb tide swept her out to sea and although searched for next day was never recovered. As this boat meant the living not only of the owner, but of several families, I had to replace it. I gave the native our large 28-foot canoe taken up on the *Arctic* in 1904. Although not as good a boat for native purposes, the man was quite satisfied to take it at least until we can procure a whale boat for him. In consequence of this, one of the new whale boats had to be left at Fullerton. These are splendid boats and we should have at least two more, viz., one for Churchill, and one for Chesterfield.

Boats on Adventure.—There were five boats on this steamer, but of these only two were used for landing. Of the other three two were life boats and unfit for the work and the third was a 'jolly boat' and only fit for landing passengers, being too small for anything else. This work of landing is very hard on boats and they are badly knocked about.

With three men off duty the work of building has been hard, and I was compelled to stop rendering assistance in unloading. The men are working ten hours a day on the buildings, viz., from 7 a.m., to 6 p.m., with an hour for dinner.

Weather.—This has not been bad for building although rough at times for landing.

Photographs.—I inclose one showing the graves of the late Staff-Sergt. Hayne and Constable Russell at Fullerton. The relatives might perhaps like to have copies.

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Since we arrived here I have been so busy that I have had little time for any office work. All the men are contented and working with a will and except for strains and minor things are well.

Constable Verity has been laid up with an abscess on the knee, but is almost well again. It was brought on I fancy by the heavy and unusual work of carrying coal. &c.

I expect to leave for Norway House, if dogs are sent up about the beginning of February.

I have the honour to be, sir,

Your obedient servant,

J. D. MOODIE,

Supt. Commanding 'M' Division.

COPY OF DIARY.

Saturday, August 11.—319 bags coal landed at Burwell altogether. Ice drifting into cove and harbour delayed work. Left Burwell at 7 p.m.—fair night, strong east wind. Fog came down about 10.30 p.m., and had to go slow and half-speed most of night. Heavy pans of ice met. Ungava bay apparently full of ice towards the south.

Sunday, 12.—Fog and clear alternately, with some ice, but nothing to stop vessel, when no fog. Very little ice after passing Apatok and Cape Hopes Advance.

Monday, 13th.—Made fine run along coast, keeping to south shore. Foggy most of day, with intervals of clear weather. At 1.30 p.m. got up to Préfontaine, where we intended to put in. When abreast of entrance a thick fog shut out the land, making it unsafe to go in. Made Cape Wolstenholme at midnight.

Tuesday, 14th.—Splendid day, sea like glass. Ran down between Mansfield and Coates islands.

Wednesday, 15th.—Strong southeast wind with choppy sea all day. No sight of land. Stopped from 8.45 a.m. until 11.10 to fix condenser, going slow head to wind part of afternoon; then lay our course until about 5 p.m., when it came on thick again and we lay-to head to wind. Supposed position about 20 or 25 miles southeast of Fullerton.

Thursday, 16th.—Thick all last night. 40 fathoms of water where we lay-to. Drifted into 30 fathoms, and then at 3 a.m. into 17, when the anchor was dropped. Rain and dense fog all day until 4 p.m., when it cleared up somewhat, and anchor was hove up. Fog came down again about 4.45, and we anchored once more. At 5.45 it cleared, and land was seen, but it again became thick, so that it was impossible to locate any land marks, and at 7 p.m. anchored for the night. Frequent rain squalls during the day. At 8 p.m. wind from west northwest—smooth sea and all well.

Friday, 17th.—Foggy all day—when it cleared in p.m. found we were off Southampton, and had to anchor until 10 p.m., when steamed west.

Saturday, 18th.—Made the beacon on Barrel island, at entrance to Fullerton, about 5 a.m., and got into outer harbour about 7 a.m., and entered inner harbour at 9.30 a.m. Commenced unloading coal after dinner. Fine day.

Sunday, 19th.—Went through books and found that nothing had been entered since July last year in ledger or journals except part of the provisions left there when the *Arctic* sailed and the articles traded to natives.

Monday, 20th.—Crew, police and natives landing coal at Barrack landing. Started work on books. Fine, but windy. Native boat lost this p.m. (see separate letter).

Tuesday, 21st.—Same routine.

Wednesday, 22nd.—All hands unloading coal on 'store island.' Scottie returned from hunting; brought in 9 deer. Constable D'Amour off duty.

Thursday, 23rd.—Fine day. Landed 813 bags coal. Same routine. The doctor left with some natives hunting.

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Friday, 24th.—Fine day, east wind. Same routine. Total number of bags coal landed to this p.m., 3,752 bags.

Saturday, 25th.—Strong east wind and thick fog. Same routine.

Sunday, 26th.—Wet all day. East wind and thick weather.

Monday, 27th.—Blowing and cold. Same routine. Hunting party returned with 8 deer.

Tuesday, 28th.—Landing coal, &c. Same routine. Blowing hard.

Wednesday, 29th.—Landing coal, &c. About 5,000 bags coal landed in all, including broken bags.

Thursday, 30th.—Fine day. Finished returns as well as possible. Men transferred to and from shore. Sergeant McArthur, Constables Macmillan and McDiarmid to shore. Finished landing necessary stores. Spoke to Mr. Caldwell re going with us to Chesterfield: that I would take him to the entrance of the inlet, but could only carry three boats, and these would not be sufficient to carry his supplies. Also that if it came on to blow from the west or thick weather came on the steamer could not go in, and that I could not afford the time to lay off that place. It had been decided not to land cargo there. He decided not to take chances, but to go from Fullerton by boat. This would only take him two days, one to Depot island and one to Chesterfield.

Friday, 31st.—Steamer went out and anchored in outer harbour about 11 a.m. I was ashore paying off the natives for unloading, &c.: cost of this to be charged to steamer—this at captain's request. Got aboard about 12.30, and steamer sailed at 2.15 p.m. Fine bright day and clear night; made good run.

Saturday, September 1.—Clear, bright day, making good progress.

Sunday, 2nd.—Anchored about 1 a.m. off Churchill. Steamed in and anchored off Battery beacon about 9.30 a.m. Beech and his son came down to the shore and a boat was sent for them, Beech has his wife with him and is living in a small shack about three miles up the river on the east side. He has staked out a large number of claims. In the afternoon landed and walked up to the Hudson's Bay Company's post, about 4 miles from where the steamer is anchored. Saw Mr. Boucher, the officer in charge. The company's steamer *Pelican* left here on August 22. All the natives have left, in fact Mr. Boucher told me he hurried them away purposely when he heard we were coming, so that they should not be detained helping us to unload. One of our boats has been sent to York Factory, and the two large boats belonging to the company have gone up the coast.

Monday, 3rd.—Left at 7 a.m., with the doctor and Mr. Thibideau, for the company's post to go with Mr. Boucher to look at a site for barracks. This is about 4 miles above the post on the same side of the river (west side). It is a nice place right in the bush, but too far away. Constable Donaldson slipped on a ladder going to main deck yesterday and is off duty and in great pain to-day. I did not know of the accident until after my return to-day.

Tuesday, 4th.—Wet day. Total sacks landed here to p.m. to-day, 362. Sent whale boat and police crew to the company's post to get a pilot to move steamer to a better place.

Wednesday, 5th.—Thibideau went to east side of river with Constable Heaps. Police carrying up coal from where it had been landed. Crew landed 170 bags in a.m., making raft in p.m. Wet day, extra strong tide, fully 6 knots. Wind changed to northerly.

Thursday, September 6.—Loaded one of the company's boats, which had returned with provisions and went up to the post at 6.30 a.m. with police, and put supplies in the warehouse with other police stores. Returned with Boucher and his clerk at 11 a.m. In afternoon went ashore on east side, and looked over the ground. Nothing suitable for building within 7 miles of anchorage. Crossed river and finally selected site almost opposite Battery beacon. It is almost adjoining what is marked on charts as 'Sloop cove.' It is a fine, dry plateau, and fairly well protected. Two fresh-water ponds are close to where the buildings will be located and scattered spruce within a

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mile or two, but these are small. At 6 p.m. police and crew towed in raft loaded with lumber, but could not make the right landing and had to beach it higher up. Went ashore and got tents pitched, and later the company's boat came in at high water with about 10 tons of supplies. Police unloaded her and we got back to the steamer at 9.30 p.m. A good day's work.

Friday, 7th.—Left steamer at 7.45 a.m., with large boat *Strathcona* loaded with lumber. Police and company's men discharged her by 10 a.m. Crew brought in two lashed boats with lumber, and after discharging went to assist police in bringing in the raft, then carried up most of the lumber to above ordinary high water mark, but had to return to ship on account of tide. Had to leave the lashed boats anchored, and had great difficulty in making back to the vessel. Blowing too hard to do anything on evening tide. Men worked hard. D'Amour fit for light duty, and sent him with Thibideau. Lent the latter an 'A' tent. Constable Donaldson returned to light duty. Rain and wind most of day.

Saturday, 8th.—Left steamer with *Strathcona* loaded with lumber at 8.10 a.m., and had her unloaded by 9.20 a.m. Two loads lumber on lashed boats landed. Raft put in position to act as landing stage and made fast. Two more tents put up for stores. Marked out position of buildings with stakes, and returned to steamer at noon. The other boat of the company returned from Egg island. Tide does not suit for landing more to-day. Steamer moved over to west side of harbour about 3 p.m. Fine day. Thibideau, D'Amour and a half-breed ashore surveying.

Sunday, 9th.—Pouring with rain all day. The Captain, Dr. and I went to Hudson's Bay Company's post to see about the two large boats. Boucher promised they would be down on the evening tide.

Monday, 10th.—Fine day. Landed 7 loads on police and ship's boats (2 boats lashed together). Company's boats only arrived on afternoon tide to-day. Loaded them ready for to-morrow. Police commenced working on buildings and some assisting in discharging boats. Big launch working well.

Tuesday, 11th.—Bad day, easterly wind causing quite a swell at the landing. Only got one large and two of our boats in. Police on buildings, and will not be able to render further assistance in landing cargo.

Wednesday, 12th.—Landing lumber and supplies. These are only landed clear of present high water, but not of the fall tides, which are much higher. Fine day and made good progress. Got sills laid and part of frame of barrack-room up. Constable Verity off duty with abscess on knee.

Tuesday, 13th.—Again a beautiful day, and made good progress. Finished frame and commenced boarding in barrack-room.

Friday, 14th.—Again fine, with westerly wind. Work, both building and landing, progressing well. Called the captain's attention again to the fact that goods were not being landed above reach of tides at this time of the year (that is fall tides), and in the afternoon we had them put up above this mark. He reiterated a former statement made to me that he would not risk the ship here after the first of October, and wanted to know if he could land the coal at high water by merely throwing it overboard from the boats, and I could hire natives at ship's expense to carry it up later. If natives could be got this might be risked, but I told him that I would not be responsible for coal so landed, as there was no certainty of getting it up, and ice would most probably come and cut the bags all to pieces. He said then the coal will have to go back, to which I replied that it was the ship's business and I could not take any responsibility, and that he knew the terms of the charter.

Saturday, 15th.—Blowing nearly a gale from the southeast, causing heavy swell on shore. Only landed one double boatload in a.m.; too much surf to take the large boats in; they were loaded and lay off at anchor. In p.m. had to take part of the cargo off the *Strathcona*. Raining heavily most of day, but men working on buildings until 4 p.m., when they had to stop.

Sunday, 16th.—Water smooth and light wind. Men coming on board to write letters. Sergeant Nicholson off duty with badly swollen wrist; Constable Verity some-

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what better. Hudson Bay Company's men went up to the post to church, and in the afternoon came down to take back the *Strathcona*, although she was loaded. This means that we have to haul her load back to barracks later on.

Monday, 17th.—Splendid day. One large and two double boats landed in a.m. and same in p.m. Doctor and I laying floor in barrack-room. All men working on same.

Tuesday, 18th.—Eight double boats landed to-day. Tide very high; splendid day. Doctor and I finished floor of barrack-room.

Wednesday, 19th.—Fine day. Men working on barrack-room. Doctor and I laying floors in kitchen and porches.

Thursday, 20th.—Men off work on barrack-room except the carpenter. All hands carrying up flour and provisions above high water. The high tides this week came up to some of them.

Friday, 21st.—Boucher sent down our boat which had returned from York, and instructed them to take back the company's boat. I wrote to him, and he agreed to leave it another week.

Saturday, 22nd.—Crew landed 426 bags coal last night and to-day by throwing it into the water, and afterwards they carried up part of it; balance still in the water where it was dumped. There will be considerable loss in coal from the poor condition of the bags and the bad sewing. Can do no better with means (men) at our disposal. Constable Veritz better; D'Amour off duty. Splendid weather all week.

Sunday, 23rd.—Fine day. Verity up to meals; walking with a crutch.

Monday, 24th.—Strong northeast wind, which prevented the large boat being loaded. Two double boatloads of coal got off on 8.30 a.m. tide; tide not suitable earlier.

Tuesday, 25th.—Fine day and calm. Doctor and I with all hands working on building. Crew landing coal, &c.

Wednesday, 26th.—Very stormy. Landed two double boats. Went ashore and had to remain all night. Working on buildings.

Thursday, 27th.—Fine day. Working on buildings. Crew landed stores, baggage, &c., and some coal. Raining and blowing hard all night.

Friday, 28th.—Dull morning, but no sea or wind. Crew were going ashore at 5 a.m. to carry up coal but too much sea on. Doctor and I went ashore, working on buildings. Had to remain all night.

Saturday, 29th.—Dull morning, clearing in afternoon. Got launch ashore and hauled up. On recommendation of Assistant Surgeon Flood, Constable D'Amour is being sent back on steamer. We land finally to-morrow afternoon, and the steamer sails for home on Monday morning.

Wednesday, 26th. continued.—Whale boat and one of the *Neptune* boats lashed together were moored astern of the Hudson Bay Company boat. They broke adrift in the storm and went ashore on the boulders. The former can be repaired, but will never be as good as before. The latter is not worth the cost of repairs; she is almost useless. These boats were lent to the ship and were handled by her crew.

J. D. MOODIE,
Superintendent.

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APPENDIX M.

PATROL REPORT, CORPORAL J. ROWLEY. FULLERTON TO BAKER'S LAKE, HUDSON'S BAY,

ROYAL NORTHWEST MOUNTED POLICE,
FULLERTON DETACHMENT, February 3, 1906.The Officer Commanding,
R. N. W. M. Police.
'M' Division.

SIR,—According to instructions received, I left here on January 8. for Baker's Lake, with team of 10 dogs, H. Ford, interpreter and 'Poke,' native. I was accompanied by G. Caldwell, en route to Churchill, whom I had orders to assist in every way possible, his plan being to secure dog team and guide from Chief Atungilah at Baker Lake, as the team with which he left Fullerton, being composed partly of police dogs and partly borrowed from natives, was to be returned to Fullerton by our patrol.

The route we took was from Fullerton along the coast to Winchester inlet, which we followed from the head, and thence due west across country to head of Chesterfield inlet. I estimate we covered about 350 miles altogether in direct line from point to point.

On January 13, we struck some hills and rough ground. Caldwell's dogs were unable to pull his load and all the mud broke off his sleigh runners in p.m., which made it necessary for us to lay off next day to repair it. We were making such slow progress that I decided to leave some of our provisions behind and take some of Caldwell's load on my sleigh, as this was the only way we could get him through with enough provisions to reach Churchill.

On January 25, we reached a camp of two Igloos and about 25 natives on Lake Ta-si-tuak. They were fishing in lake, and had a good supply of deer meat. They appeared in good health. It was here, about 60 miles inland from the coast, that deer began to be numerous. From here on we saw fresh tracks every day.

On January 19, we reached Chief Atungilah's camp, which was located on a small lake a few miles inland, and north from head of Chesterfield inlet. Atungilah and his men were all absent deer hunting, and it was five days before we could complete arrangements for Mr. Caldwell to proceed to Churchill.

From Chief Atungilah I recovered the mail which was sent from steamer *Neptune* in winter of 1903-4 and failed to get through. The native who had it was afraid to come near us. Atungilah said he thought the parcel had been opened up by natives to see if there was any tobacco in it, and sewed up again.

Mr. Caldwell secured 10 dogs and a good guide known as 'Mr. Atungilah,' also another native assistant. I handed over our mail to Mr. Caldwell before I left. Owing to his guide not being ready, he was not to start for Churchill until about 5 days after our departure. While waiting for arrival of Antugilah I made a trip to Chesterfield inlet, where our cache of meat and biscuit had been left in summer. I found it safe, but most of the biscuit had been damaged by water. I left Mr. Caldwell some meat and biscuit, so that he would not be in danger of running short on his way to Churchill.

On January 25, I left Antugilah's and arrived at Fullerton on February 2. The weather was fine, but cold, during the whole trip, a little wind every day, but no storms. I lost one dog, frozen the night before arriving at Fullerton. He was one of the dogs purchased at Churchill and had always seemed in poorer condition than the others.

COPY OF DIARY.

January 8.—Left Fullerton 10 a.m. Party consisted of Corporal Rowley, H. Ford, interpreter; Poke, native, accompanied by Mr. Caldwell, and Joe, native, two teams, 10 and 9 dogs. Camped about 18 miles from Fullerton at 3 p.m.

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January 9.—Broke sleigh runner on leaving camp. Sent Poke back for another sleigh, with which he returned at 5.30 p.m.

January 10.—Left camp at 8.45, weather rather thick. At noon started overland on cut off to Winchester inlet. Camped at 2.30 on small lake. Made about 20 miles.

January 11.—Left camp 8 a.m. Delayed over an hour by rough ice. Good running in p.m. to head of Winchester inlet. Saw fresh sleigh trails of natives en route to Fullerton. Made about 22 miles.

January 12.—Left camp 8.30 a.m. Very cold. Uphill pull until noon. Made fairly good time in p.m. Camped 3 p.m. Blowing a little. Made about 20 miles.

January 13.—Mud broke off runners on Caldwell's sled. Camped early as dogs could not pull Caldwell's load. Only made about 8 miles. Cold, with wind.

January 14.—Remained in camp and repaired sleds. Decided to leave some of my load to use on return trip, and to take some of Caldwell's on my sleigh. Fine, but cold.

January 15.—Left camp 8.15 a.m. Very good trail. Reached Blanket's camp 2.30 p.m. Two large Igloos. Bought some dog feed. Made about 24 miles.

January 16.—Lay off at camp. Caldwell hired two natives and four dogs to lighten his load.

January 17.—Left camp 7.30 a.m. Saw fresh deer tracks. Made 24 miles and camped at 2.45 in old Igloos.

January 18.—Left camp 8.30 a.m. Clear and cold. Northerly wind. Saw some deer. Followed them with Poke and shot one for dog feed. Made about 15 miles.

January 19.—Made about 16 miles and reached Atungilah's at 1 p.m. All men absent deer hunting. Seven Igloos and about 60 natives belong to camp.

January 20.—Went to Chesterfield inlet with dog team and got case of meat and case of biscuits from our cache. Atungilah arrived.

January 21.—Mr. Atungilah arrived from direction of Shultz lake and promised to take Mr. Caldwell to Churchill.

January 22.—Got chief to send for two deer which he had cached for us for dog feed.

January 23.—Handed over mail to Caldwell to take to Churchill.

January 24.—Blowing rather hard. Decided to leave next day. Gave Mr. Caldwell 24 pounds beef and some biscuit. Offered him case of pemmican which he refused and which I then left in our cache.

January 25.—Left camp 9 a.m., 16 dogs and 2 sleds. Camped in our Iglo 16 miles out.

January 26.—Made about 19 miles, met dog team and natives returning from Fullerton. Lost about 2 hours chasing deer.

January 27.—Made about 20 miles and reached Blanket's camp. Weather stormy. Saw some deer quite close. Joe and Poke fired, but missed.

January 28.—Stayed at Blanket's to give dogs good rest and good feed. Bought dog feed and some fresh fish.

January 29.—Made run of 24 miles to where we left our cache. Met 3 natives en route to Fullerton. Weather fine.

January 30.—Made about 24 miles on our return route, but went farther actually, owing to making detour to avoid hills.

January 31.—Travelled down to mouth of Winchester inlet, and camped in sight of Depot island. Made 22 miles. Saw 2 deer.

February 1.—Reached our first camp out of Fullerton. Made about 24 miles. Dogs tired. Had one on sled part of time.

February 2.—Left camp 6 a.m. One dog lost. Frozen during night. Arrived at Fullerton about noon.

I have the honour to be, sir,

Your obedient servant,

JOHN ROWLEY,

Corporal.

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APPENDIX N.

PATROL REPORT, CONSTABLE L. E. SELLER, FULLERTON TO LYONS INLET.

FULLERTON, May 1, 1906.

The Officer Commanding,
 'M' Division, R.N.W.M. Police,
 Fullerton.

SIR,—I have the honour to submit the following report *re* patrol to Scotch ship *Ernest William*, Safety Harbour Lyons Inlet, latitude, N. 66°20'; longitude, W. 83°40', about 20 miles north of the place Parry wintered in 1821, with the *Fury* and *Hecla*.

My orders were to proceed to the ship supposed to be wintering at 'The Islands,' Repulse bay. On arrival there I found that she had left. From some Nitulick natives I learned that the ship had been towed by the ss. *Active*, Captain A. Murray, to 'Melachusutuck.' Fortunately I had heard of this place, and had had it pointed out to me on the map. Tupealock knew the way, so I decided to enlarge my orders and proceed to the ship, which I found at the above named place. Interpreter Ford and Native Tupealock were detailed to accompany me. The rough sketch attached will show the route travelled as near as possible.

I have the honour to be, sir,
 Your obedient servant,

L. E. SELLER,
Constable.

ROYAL NORTHWEST MOUNTED POLICE.

FULLERTON, May 1, 1906.

'M' Division.

The attached is a rough sketch showing the route travelled, &c., which the following will explain. (See page 127).

- A. Where deer were killed.
- B. Caches.
- C. Natives (Nitulicks and Iviliks.)
- D. Picked up native guide.
- E. Broke sleigh.

1-17. Shows days actually travelled, going.

1-13. Shows days actually travelled, returning.

15. Ships anchorage, Repulse bay.

17. Position of *Ernest William*, Lyons Inlet.

8. Shows cache made going up.

.. Shows route travelled going up.

— Shows changes in route travelled returning.

F. Shows where Capt. Comer got seven whales last summer.

11. Shows where walrus meat was cached.

B. 10 7. Shows where Cleveland's House was.

A. Scotch station now abandoned.

COPY OF DIARY.

February 21, 1906.—We left detachment at 9.30 a.m., and made a fairly good day's work. The weather was cold but very little wind. We had rather a large load for fast travelling, but made fully 25 miles.

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February 22, 1906.—Broke camp 8.30 a.m., and reached Whale Point at 2.30 p.m. The rough ice damaged our sleigh considerably by knocking off the mud, and it will necessitate laying over to-morrow to fix it. Dull day. Scarcely any wind. Made fully 20 miles.

February 23, 1906.—Fixing sleigh and other odd jobs. Slight fall of snow towards evening. No wind.

February 24, 1906.—Broke camp 8 a.m., the travelling was very rough for a few miles and very heavy as there had been quite a fall of snow during the night. Made 15 miles.

February 25, 1906.—Very bad storm; wind blowing from N. E. Dogs in good condition.

February 26, 1906.—Still storming. Wind from same direction. Cleared towards evening. Had a hard job to get out of our Iglo, as it was covered over by a large bank of snow.

February 27, 1906.—Broke camp very early, 7 a.m. The going was excellent, the weather all one could desire. No wind. Reached the place where we take the land, making 35 miles.

February 28, 1906.—Weather very dull, with light fall of snow, clearing towards evening. Saw ten deer shortly after leaving camp about 9 a.m. We followed the course of a small river for ten miles, and then took the land which was very hilly and rough. About 1 p.m., we sighted another herd of deer and I sent Ford and Tapealock after them. They were fortunate enough to kill one each. I had camp made where the deer were killed. I fed the greater part of one to the dogs, the remainder I kept for ourselves. The other I cached for our return. I had a shot at one that wandered near the sleigh, but only wounded it. The .303 hard nose has very little effect, unless hit in a vital spot. Made 15 miles.

March 1, 1906.—Very bad storm in a.m. Clearing in p.m. Tapealock went out in the evening and shot a deer, caching it in the rocks for ourselves on our return should we require it. The dogs are all in good condition, and everything ready for an early start in the morning.

March 2, 1906.—Broke camp 7.30 a.m., and about three miles from camp had a bad accident, breaking the high runner of our sleigh about four feet from the nose. The country through which we were travelling was very hilly and full of deep cuts down which we would have to lower the sleigh. I had the dogs hitched to the hind end and we continued our journey. About 3 p.m., the same runner broke again. It was the first really rough day's travelling to-day, but the wood in the runner was no good, simply rotten and it is no wonder that it broke. Made camp where we broke down, making only the short distance of ten miles. The weather was clear, but very cold.

March 3, 1906.—Very bad storm. Cold wind from northeast all day. I had Tapealock build a snowshed to enable us to work on the sleigh. I had the sound runner cut in two equal parts and using the hind end for the nose of the high runner. This made the sleigh rather short, 10 inches, but I would have no splicing, as the wood was not good enough. Until we reach the Wager, we will use a short outrigger behind, where we will put all the light articles, such as bedding, &c. Our alcohol is finished, so we will have to cook our meals with wood.

March 4, 1906.—Bad storm, wind from northeast. We did not leave camp. Cooked our meals with wood.

March 5, 1906.—Broke camp 6 a.m. Lovely calm day. Travelling fair, although very rough in places. About 10 a.m. we struck the course of a small river, and we followed it to the Wager, which place we reached about 3.30 p.m., but alas, nothing but running water a mile or so from shore. Saw a bear, and Ford and Tapealock went after it, but did not get it. Our sleigh is very much stronger, but the load being so high it keeps continually upsetting, even with a man on either side. Every small snowbank the nose digs in and holds on like grim death. Made fully 35 miles.

March 6, 1906.—Broke camp 8 a.m., and worked up the coast for 10 miles or so before we could find a place to cross. The crossing was terribly rough, and took us

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until nearly 8 p.m. before we reached the other side. It is only about 10 miles wide where we crossed, making a total of 20 miles for the day. Very calm day, but cold.

March 7, 1906.—I had a cache made of everything except our bedding and two days' rations for ourselves. We had one small feed for the dogs. It was our only chance of making time, as the country was very rough and the sleigh too short for a big load. I expect to reach cache at mouth of Wager in two days if weather holds good. The deer tracks were very numerous, but as the day was very calm we did not get near any. We had to unhitch the dogs three times to-day, as the descents were very long and steep. We also had some high hills to climb. Our supply of biscuits was finished last evening, and we had been on small rations for some days. Made 30 miles in a northeasterly direction. One dog, 'Major,' was badly bitten last night on the off hind paw. It was very sore to-day.

March 8, 1906.—Broke camp at 5 a.m., and kept same direction for a short time, when I thought we were getting too far north, so I changed the course to east. Shortly after noon we ran across a small river and followed it to the coast. The general direction was east and southeast. We reached the coast about 5 miles above the cache, and found the cache about 7 p.m. We only took a few biscuits out to-night; to-morrow I will overhaul everything, and take what I require. All the dogs are in good condition except 'Major.' Made 40 miles. Calm day, but very cold.

March 9, 1906.—I had the cache taken out and checked. Found everything in good condition with the exception of biscuits; they were slightly damp on top. I took out the following for use between here and Repulse bay: 25 pounds biscuits, 30 pounds pemmican and 36 pounds of canned meat. I closed it again. Found some wood where Cleveland's house stood and promptly annexed it, as we had nothing else to cook with, I also took all the wood from the cache, that is, the boxes. Turned very cold, with heavy drift towards evening. The sleigh was remudded and everything fixed up. Our sleeping bags are getting very damp. Fed the dogs 20 pounds of pemmican to-night.

March 10, 1906.—Cold, stormy day, with heavy wind from north right in our faces, and we found it very hard travelling. We reached the walrus meat cache about 2 p.m. and camped. Most of the meat had been eaten out by bears and other small animals, so we had to take some meat belonging to 'Sam,' one of the Ivilick natives. I will pay him for it, or leave something at the Scotch ship for him. It has been by far the coldest day we have had so far (it was 47 below zero at the ship, as I found out afterwards). Made 20 miles.

March 11, 1906.—Very bad storm. Took out some meat and had it cut up for use between here and ship. All the dogs except 'Major' are in good condition. His sore leg has been badly frozen, but he hops along on three legs. Terrible job trying to cook in a blizzard with wood.

March 12, 1906.—Still storming and very cold. Wind from northeast.

March 13, 1906.—Still storming and very cold. Clearing towards evening. All ready for an early start in the morning.

March 14, 1906.—Broke camp 7.30 a.m. Wind from southwest. Made a fairly good day's work, 35 miles, and camped at mouth of small river, where we take the land. Tupealock not feeling very well, the result of a bad chill.

March 15, 1906.—Terrible blizzard. Wind from north. Made a warm breakfast, but finished the day on dry biscuit and pemmican, as our wood is nearly finished.

March 16, 1906.—Broke camp at 8.30 a.m., and followed the course of a small river for nearly 15 miles. Shortly after leaving river we sighted deer. I sent Tupealock after them, as we were badly in need of grub-stake both for ourselves and the dogs. He had splendid success, as he got three. We needed them badly. I fed one to the dogs and cached another for our return. The other one I will take along. Our biscuits are all finished, but in a couple of days at the most we expect to reach the ship. Used the last of our wood to-night.

March 17, 1906.—All ready to break camp at 9 a.m., when it came on to blow. I decided to wait for an hour or so, but it got worse and I had the outfit put back. The storm was very bad in p.m. Wind from northwest.

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March 18, 1906.—Broke camp 8 a.m. Very heavy wind from north right in our face. Soon after leaving camp it came on to drift and by noon it was a terrible storm. Both Ford and myself were badly frozen in the face. Made 10 miles.

March 19, 1906.—Broke camp at 4 a.m., having slept in our furs all night. We reached salt water about 7 a.m. About 3.30 p.m. we reached the anchorage in the islands, Repulse bay, and to our surprise no ship could be found. We had a look around for some sign of natives and to see if our cache had been left. We saw a block of snow with a stick in it pointing towards Beachy Point, and Tupealock told me he thought it quite probable that some natives would be found between here and Beachy Point. We have only 50 pounds deer meat and 2 pounds pemmican and 6 pounds boiled beef for ourselves and dogs, so we must find natives. Very cold day. I had both my feet badly frozen. My footgear is in a very bad state, wet and worn out. We were compelled to break up some barrels, &c., and cook some food, as we had been existing on frozen meat for the last three days. These barrels I found out later belonged to the Scotch ship *Ernest William*. Made 35 miles. The travelling was good, all down hill to the salt water.

March 20, 1906.—Terrible snow storm; impossible to go out looking for natives. Our dogs are getting hungry, as they have had nothing since the 16th instant, and we cannot possibly give them anything out of what small supply we have for ourselves. My feet are very sore, the result of frost burns.

March 21, 1906.—Bad storm, but not nearly so bad as yesterday. I sent Ford and Tupealock out to have a look for natives. They travelled in large circles all day, and towards evening, about 2.30 p.m., the dogs scented the native camp. I had told Interpreter Ford to inform the natives if he found any that I would purchase quite a quantity of dog meat and some deer meat for ourselves. He had also to make inquiries regarding the ship, what had become of her, &c. They returned at 5 p.m., bringing information that cheered us quite a little. The ship was at 'Melachuseetuck' (The-place-where-ghosts-chase-women), about three days from here. He brought in some meat for the dogs, and said that the natives, who belonged to the Nitulik tribe, would come to us in the morning with as much meat as they could spare. I had no chart or map of any description by which I could locate the place, but fortunately Tupealock said he knew the route well. I decided to try and make it in two days if at all possible. Made 35 miles.

March 22, 1906.—Still storming. Finished up all our meat for breakfast. About noon the natives came in bringing in about 400 pounds meat, which I purchased from them. It was nearly all seal meat, very little deer meat, and we found it rather high all by 'tself, but hunger is a great sauce. I also purchased two summer deerskins from them, and had a woman stay with us to make them up into socks, &c. The woman was well known at Fullerton last winter as 'Myria,' and belongs to the Ivilik tribe. Our sleeping bags are so wet that we are sleeping in our furs (clothing).

March 23, 1906.—Still storming, but cleared up nicely towards evening, and we are all ready for an early start in the morning. Ford and Tupealock were cutting up the meat for use between here and the ship. I have had 200 pounds meat cached for our return. The dogs are picking up. 'Major' is still very lame.

March 24, 1906.—Broke camp at 5 a.m., and made good fast time all day until dark, when we made our camp in an old igloo. Cooked our grub with wood taken from the islands. We had a narrow shave to-day. While navigating a sloping bank along a very narrow river bottom, the sleigh began to slide down on us, and despite all our efforts, it carried us all down over a cutbank fully 20 feet in height. Nothing damaged except a pot, which was flattened like a pancake. Made 45 miles. Nice calm day. Wind northeast. Travelled southeast and east. Very cold towards evening.

March 25, 1906.—Broke camp 2 a.m., after a very short sleep, and were fully 15 miles on our journey before the sun was up. The dogs worked very well all day. About 8 a.m. we picked up a native who was going to the ship, so I took him along, as he could show us the exact position of the ship. The wind was very cold, with light drift, and it was 8 p.m. before we managed to reach our destination. We made fully 60

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miles, a good day's work considering we had nothing very luxurious in the grub line for the last few days, and we had lost some of our surplus flesh. No sooner had Capt. Murray been informed of our arrival than he was out welcoming us in true Scotch style. We went aboard directly, where after a short space we sat down to a warm supper to which we did ample justice. Our baggage, &c., was taken on board by ship's natives and carefully stowed away. Capt. Murray made us welcome for such time as I cared to stay, and informed me that the cache was aboard; his reason for not leaving it at 'The Islands,' Repulse bay, was that he was afraid the natives would steal it. We were given comfortable bunks, &c., and everything possible was done by the captain to make us comfortable.

March 26, 1906.—Our furs were all taken up to-day and dried on deck. I spent the day talking to the captain, feeling too tired to do any work.

March 27 and 28, 1906.—Taking things easy and collecting information regarding natives, whaling, &c.

March 29, 1906.—Commenced taking list of goods, &c., *re* customs.

March 30, 1906.—Finished list of goods, &c.

March 31, 1906.—Took a list of the furs, &c., on board, this a.m. Walked out a few miles with the captain and took a look at the country in the afternoon.

April 1, 1906.—I sent Tupealock down to the Wilik camp and told him to tell some of the natives I would like to see them. 'Albert,' one of Capt. Comer's harpooners, came back 40 miles.

April 2, 1906.—I had a long talk with 'Albert' concerning the whales they had caught during the last season at the mouth of Lyons inlet. I also paid him for the meat I took from the cache of walrus near the Wager, as it belonged to his father, 'Sam.' I found out quite a lot of interesting information which I will note in a separate column at the end of my report. Made arrangements for a supply of food with Captain Murray for our return. I gave him what biscuits and meat I didn't require, and he furnished me with all necessities, such as tea, coffee, sugar, beans, cheese, and fresh meat, marmalade, butter, &c. I had only 36 pounds canned meat and 40 pounds of biscuit to give in exchange, so it was almost a mere nothing. He also presented me with a brand new sleigh, with wide iron shoeing. I had the iron coated with blood and ice over, the same as the natives do when they are travelling. Will leave 'Major here' here, as his foot is not better, and I gave him to 'Tom,' Scotch native, as he said he would look after him. Everything ready to leave to-morrow.

April 3, 1906.—Very bad storm; wind from the northwest, stayed at the ship.

April 4, 1906.—Left the ship 8.30 a.m., very cold, light drift. Made 35 miles. Captain Murray, crew and natives gave us a hearty send-off, wishing us a pleasant journey, &c. I must say that we had a very pleasant stay and felt much better when we decided to resume our journey. Captain Murray certainly did his utmost for us. We had practically nothing with which to return, and he furnished us with every necessary article he could possibly spare. In fact, he put himself out by giving me his sleigh which he used for hauling ice to the ship. Cooking our food with wood, as we brought a small supply with us.

April 5, 1906.—All up-hill to-day, against shore wind from northwest. Made 25 miles and camped in our old igloo, taking two days to complete our last day's work to ship.

April 6, 1906.—Broke camp 5 a.m., and made 'The Islands' about 4 p.m. 45 miles. Camped in old igloo. The bottom fell out of a small box to-day and we lost all our knives, forks, spoons, &c., also a rasp which we had for fixing the mud on the runners. The dogs are in good condition.

April 7, 1906.—Broke camp about 7 a.m., made a long day's work, considering we had a much heavier load, 200 pounds dog meat and 100 pounds wood (old barrels), which Capt. Murray said belonged to him and told us to take. Made 30 miles. Slight breeze from the west.

April 8, 1906.—Broke camp 7 a.m. and crossed the neck of land to our igloo on the coast (No. 12 and 5). I was very sick to-day, as I suffered terribly from cramps

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throughout last night. Feel better to-day. Made 30 miles. Calm, clear day. Saw deer in the distance; picked up cache of deer meat since noon.

April 9, 1906.—Broke camp 8.30 a.m., and made a good run 35 miles, camping in old iglo at Walrus meat cache. Everybody and everything in splendid trim.

April 10, 1906.—Took out some more meat from cache and broke camp about 9 a.m., making old iglo at Cleveland's place about 2 p.m. Will stop over to rest our dogs and dry clothes, &c. The sun is very strong now at mid-day, very calm, warm day. Saw one seal on the ice to-day. Made 20 miles.

April 11, 1906.—Stopped over to-day and opened cache and put in 36 pounds of meat. I fixed up the cache as good as possible; there remains there at present 70 pounds biscuits, $\frac{1}{2}$ pound tea, 36 pounds boiled beef, 170 pounds pemmican. I also took $\frac{1}{2}$ pound tea and 20 pounds of pemmican. Will start early in the morning, as everything is in shape. Light breeze from north.

April 12, 1906.—Broke camp 7 a.m., and took land a couple of miles above cache, steering an almost westerly course. Tupealock took sick after a few miles on the trail, so he rode for the day. Saw deer towards evening. Calm, clear day. Sun very strong. Wore glasses to-day for the first time. Made 30 miles.

April 13, 1906.—Broke camp 7 a.m., taking west and southwesterly course. Tupealock killed two deer about 11 a.m., about a mile or so out of our course. He herded a wounded one down to the sleigh and we took it along with us. We made camp on an island about 3 miles from shore. I sent Ford, with the dogs, to bring our cache down, which was a few miles further up the coast. He succeeded in finding the place, but it was covered over with snow, so he could not get at it. Ford became snow-blind shortly after he returned. I bandaged his eyes, putting some cold tea-leaves on them. I decided to stop over to-morrow. Warm, with very strong glare. Light breeze from west. Made 35 miles.

April 14, 1906.—Tupealock and I went after cache and dug it out. Very heavy fall of light snow. Heavy wind and a blizzard in the evening. 10 miles. Found the cache in good order. Dogs in splendid condition. Two bitches are very heavy in pup.

April 15, 1906.—Broke camp at 4.30 a.m. Ford riding on sleigh as he has a bandage over his eyes. Made a fairly good day's work. Crossing the Wager was much easier than going as we kept up farther. Where we took the land it was much rougher. Made 30 miles.

April 16, 1906.—Broke camp 4.30 a.m., making a long day's run, reaching the coast about 5 p.m. Made fully 40 miles. Picked up one cache about 3 p.m. We didn't need the other, as we had plenty of supplies. Ford working to-day as his eyes were better.

April 17, 1906.—Broke camp 7 a.m., and made whale point about 8 p.m. Saw some seals on the ice to-day. Also saw a great number of bear tracks. Everybody feels tired to-night, and I have decided to lay over to-morrow, as it is a long run from here to Fullerton. Made 45 miles. Camped in the house. Warm day-light breeze from east.

April 18, 1906.—Stayed over to-day to rest ourselves and dogs. The dogs are in splendid condition, but very little life, as the last few days have been very hard on them.

April 19, 1906.—Broke camp at sunrise (about 4 a.m.), and made detachment about 2.30 p.m. Some few miles from barracks I noticed the flag at half-mast, which told me plainly that what I feared had come to pass. On arrival my fears were confirmed on hearing that Staff-Sergt. Hayne had passed away the night before. We were just in time to attend the funeral. Calm day. Light breeze from northeast and very warm. Made 45 miles.

MILEAGE.

Number of miles travelled going.	465
Number of miles travelled returning.	455
Looking for natives in Repulse bay.	35
Ship to Ivilick camp, Winter island.	40
Total mileage for the trip.	995

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DOGS.

I had the following dogs on the trip: 'Bruce,' 'Smoker,' 'Blackhead,' and 'Stump' (leader) purchased in Labrador. 'Sport' and 'Major' purchased in Fort Churchill. 'Onionuck,' 'Tuchewetuck' and 'Tuckquetook' purchased from Fullerton natives. 'Ijuck' belonging to 'Poke.' I had nine police dogs and one on loan.

DOG FEED.

I used 30 lbs. pemmican for the dogs and ten pounds for ourselves. I left detachment with 150 lbs. meat. Meat purchased from natives, 1,160 lbs. Deer killed on trip and fed to dogs about 500 lbs., making a total of 1,740 lbs. This gives an average of 3 lbs. per dog per day.

RATIONS.

I had six week's rations with the exception of biscuits and meat. Of the former I had 30 lbs., of the latter 25 lbs. These rations lasted us very little more than a third of the time for which they were intended, and we were forced to exist on the produce of the country, deer, with some small help from the cache at the Wager. Capt. Murray gave us a complete outfit to return with.

CACHES.

One cache still remains at Cleveland's place, near the mouth of the Wager. Its contents are as follows: 70 lbs. biscuits, 170 lbs. pemmican, $\frac{1}{2}$ lb. tea and 36 lbs. canned meat.

LAMPS, ETC.

I had one small alcohol lamp with one gallon of alcohol. This lamp was so poor it took fully three hours to boil three pints of water. I had also a smudge lamp, using coal oil, but the dirt and stench nearly killed us, so I had to pitch it away. After the alcohol was finished, in 12 days we used wood when we could get it, otherwise we were forced to eat our food frozen and raw. This is very poor accommodation for persons working hard, especially in such cold weather, when one needs the best of food and plenty of it to keep out the cold. Two good lamps would add to the comfort of a party travelling, and no patrol should be made without them.

DEER SKINS.

The deer skins furnished us for the trip, with some exceptions, were very poor. They had been made by the natives for trade and just stuck together, besides being made out of inferior skin. The one pair of extra socks and boots issued me lasted one day, and then I had to rely upon my own clothing which is not warm enough for this country. Our sleeping bags were good, but they soon got damp, as we had no sealskin covers. Our 'Korlitangs,' &c., were all one could desire.

NATIVES.

The Nitulicks at Repulse bay were the first that we had ever seen. There would be probably 40 men, women and children all told. These live on the ice all winter. They manage to subsist on seal, which they harpoon when he comes to his hole to breathe. They build a small wind break of snow and stand in the shelter with their harpoon all ready to strike at the seal when he pokes his nose through the hole. They frequently spend a whole day in this attitude before they are successful. Even then the seal may not come to that hole as they generally have seven or eight of these blow-holes. The dogs are trained to smell out the holes. These natives are the largest ones I have seen and much bolder than any other tribes. The Ivilicks may be divided into two tribes, the Scotch and the American. The Scotch natives were living near the

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ship, with the exception of some out hunting. The Americans had their camp near the Winter island at the mouth of Lyons inlet. They live entirely on seal like the Nitilucks. There are some Ivilicks on Vansitland islands. These left the tribe some few years back on account of having eaten some of their people during a famine on the Wager river. They number about 20 all told. Capt. Murray had all the Ivilick natives at the ship Christmas week and he counted them. 242 men, women and children was the result. These 242, with the 20 on Vansitland and 9 at Fullerton would be a fairly approximate number of Ivilick natives, total 271. Shortly after arrival at the ship, some natives came in from Igoolik. They are of slighter build than the other tribes and much fairer. Their cast of features is more European than eastern or Asiatic. I took considerable pains trying to find out how many there would be in the tribes, but I could not come to any definite total. I should say in round numbers, 125 in all. They did most of their trading at Pond's inlet with Captain Mutch, but this year they brought all their furs, &c., to the Scotch ship. Bear skins and ivory were the principal articles they brought. I had Interpreter Ford try to explain to them the reason the police are in the country, &c., and also about the muskox. They said they killed very few muskox as the walrus were very plentiful. The only deer hunting they did was to supply them with clothing. Their deer skins are very much darker than any I have seen on the other natives. Some of their skins are almost black, and they told me they have killed snow white deer in midsummer.

There is a rumor amongst the natives to this effect: That on a ship wintering in the Arctic ocean last winter, 1905, one white man was killed by some Nitulick natives (living inland), and that the white men retaliated by killing off three natives and all their dogs. They described the ship as follows: Small auxiliary sloop with seven or eight men, who all wore big boots with wooden soles. This, as I have mentioned, may be only a rumor. I could find out nothing that could be strictly relied upon as credible. It may be possible that some such thing happened in connection with the *Gjao*, Norwegian sloop.

One Nitulick native committed suicide last fall by shooting himself. I might also mention under this heading that Harry, Ivilick native, has been doing quite a lot of trading for Captain Comer, he having supplied him with the necessary articles before leaving last fall.

MINERALS.

Captain Murray informed me that the natives informed him there was copper at the head of Lyon's inlet, and also some dull looking mineral like silver in that vicinity. He showed me a fine specimen of mica taken from their mines at Ash inlet, Big island.

FEATURES OF COUNTRY TRAVELLED.

The first neck of land crossed between Roes Welcome and the Wager river was very rough, deep, narrow valleys, very small lakes through which we kept winding in and out. We followed the bed of a creek for some distance, cut over some high lands, and luckily found another small stream which gradually widened until it reached the Wager about two or three miles above the narrow point, which I should judge is about three miles wide at the most. The second neck between Wager and Roes Welcome is a much nicer country, big valleys, large lakes and high hills. One valley crossed I should judge to be fully 10 miles wide, stretching as far north and south as the eye could see. It looked like a small bit of prairie hemmed in between the hills. It was covered with a luxuriant growth of grass and heather. We followed the course of a small river after we had reached what seemed to be the height of land. This must be a very rapid river, as the descent is very sloping. It has also two small rapids, from 20 to 30 feet in height, where we were forced to unhitch and lower our load in pieces.

The third neck of land between Roes Welcome and Repulse bay we followed a small stream, crossed over a divide and followed down another small stream. This is much the same as the first neck only more barren, if it were possible.

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We crossed small necks of land between Repulse bay and Lyon's inlet. They were practically barren, not so hilly as the other necks, but one characteristic that stands out more than any other is its mass of small rocks and stones. Very seldom could we see a small rock or boulder which was the chief characteristic of the other necks.

GAME.

We saw deer on every neck of land, and once from the salt water along the coast. Tupealock killed seven, and Interpreter Ford one. We saw one bear, and plenty of fresh tracks on the Wager. Fox tracks could be seen almost in any direction. I got one at Whale Point. Saw several wolf tracks. A few seal were on the ice on our way back. Interpreter Ford shot a rabbit near Cleveland's place. Saw a wolverine on our way back while crossing the Wager.

VESSELS.

The *Era*, Capt. Comer, made a splendid catch of whales near the mouth of Lyon's inlet. They captured seven. I made inquiries from natives that had seen them to try and ascertain the approximate weight, but as I could not do so with any accuracy. I took the length as near as they could give it to me. It is as follows: Two large whales, length of bone 8 to 9 feet; 3 from 6 to 7 feet; 1 about 5 feet; 1 about 2 or 3 feet. Capt. Murray gave what he thought to be a fair estimate, taking the length as a basis to work on. Two largest ones estimated weight 1,600 to 1,800 each; 3 large ones, 1,200 to 1,400; 1 medium, 1,000; 1 small, 400 to 500, smallest approximate weight, 8,200 bone. This gives the *Era* for her voyage 11 whales, weight of whalebone in vicinity of 6 tons.

SS. *Active*, Capt. A. Murray, arrived at Repulse bay on the evening of August 24. They left on the evening of the 25th, with the *Ernest William* in tow, after having transhipped stores, supplies, &c., for a new crew of 1 officer and 3 men. The *Active* arrived Lyon's inlet on August 27, and left on September 11, having on board the following: 3 small whales weighing in the vicinity of 2,000 pounds bone, 38 large walrus hides, 1 bear skin (green), also the amount of furs, &c., on hand on the *Ernest William* before August 24. I could not obtain a list of these, but I understand that the late Staff-Sergt. Hayne took a list of them. Cleveland, Scott, and the late crew of the *Ernest William* went home on board the ss. *Active*. The *Active* broke her tail-shaft off Resolution island, June 29, and it took her until July 27 to make Lake Harbour, where she was beached and the shaft fixed. This is the reason of her being so late in her arrival at Repulse bay.

The *Ernest William* was frozen in November 7, latitude N. 66.20, longitude W. 83.40, near Cape Edwards, about 20 miles north, with the following crew aboard: Capt. A. J. Murray; Webster (harpooner), Thompson (ship's carpenter) and Lemon (cook). List of furs, &c., on board March 31 as follows: 150 white fox, 13 dried bear-skins, 1 wet bearskin, 1 walrus hide, 100 pounds ivory. They have seven boats crews working during whaling season, employing 40 natives with their families.

MUSKON.

I ascertained from some natives that Capt. Comer, of the *Era*, purchased the following skins from the Nitulicks while at Repulse Bay last summer: 8 skins from Nid-juck, 9 from Kim-ik-sha-raa, 10 from Co-toon-i-o, 3 from Tood-lo-li, 8 from Mueks, and some others which I could not obtain definite information about.

TRADING.

I did no trading with the exception of purchasing meat, and two small summer deerskins which I had made into footwear.

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GENERAL REMARKS.

On our journey to the ship we had to contend against some terrible stormy weather, but coming back it was splendid. I found the sleigh with mudded runners a nuisance, as the mud was all the time coming off, and impeded our progress considerably. The sleigh we returned with had iron shoeing, seal blood coating, and iced over. We had to fix this only once coming back, for which purpose we carried a small tin of blood. The sleigh was only 15 feet in length, but much wider than the sleighs used here. The nose dipped in a little more than the 20-foot sleigh but didn't upset near so easily.

One could not wish for two better men to take on a trip than Special Constables Ford and Tupealock. They are certainly willing workers. Tupealock is a splendid deer hunter, though he is a very poor shot. He had never been over a considerable part of the route before, that is from the time we left Roes Welcome, this side of Wager river, until we reached Roes Welcome, at the north side of the mouth of the Wager, but I must say he did not take us out of our route very much. On February 20, 1906, I received the appointment as acting assistant collector of customs from the late Staff-Sergt. Hayne. A separate report will be found attached under the heading of customs. Some natives told me that Capt. Comer and Cleveland had a fight over a boat, in which Comer got the worst of it. I tried to find out the truth of the matter, but the 'Scotch' natives told me one yarn and the 'American' natives another, so I do not place much reliance in the rumour.

I have the honour to be, sir,

Your obedient servant,

L. E. SELLER, Constable,

Reg. No. 3504.

CUSTOMS OF CANADA,

FULLERTON, H.B., May 1, 1906.

The Collector of Customs,
Port Fullerton, H.B.

SIR,—I have the honour to submit the following report:—

The ss. *Active* arrived at Repulse bay on August 24, 1906, and transhipped provisions and supplies to the *Ernest William*, both for ship's use and for use in trading with natives. On p.m. of the 25th the ss. *Active* left for mouth of Lyon's inlet with the *Ernest William* in tow, arriving there on the 27th inst. Left Lyon's inlet on September 11 for Ash inlet, Big island, where they have mica mines.

Attached to this will be found invoice of goods for import duty. I could not get a list of prices or even a complete list of stores, but the list will be found to be as near correct as possible, it having been sworn to as such. I found the *Ernest William* about 20 miles north of Cape Edwards. Latitude, N. 66°20; longitude, W. 83°40.

I have the honour to be, sir,

Your obedient servant,

L. E. SELLER,

Constable and Acting Assistant Collector of Customs.

LYONS INLET, March 29, 1906.

List of supplies, stores, &c., transhipped to the *Ernest William*, Captain J. W. Murray, by the ss. *Active*, Captain A. Murray, on August 24, 1906, at Repulse bay, District of Keewatin, Canada, for use in trading with natives:—

PROVISIONS.

5960 lbs. biscuits.

3 casks peas.

2 casks oatmeal.

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1 cask barley.
 3 casks molasses.
 112 lbs. coffee.
 168 lbs. butter.
 448 lbs. marmalade.
 600 tobacco.

AMMUNITION, RIFLES, ETC.

4,000 cartridges, Martini Henry.
 4,000 primers, Martini-Henry.
 8 rifles, Martini-Henry.
 5,000 primers.
 2,000 caps, Rifle No. 18.
 3,000 caps, Rifle No. 12.
 1,000 lbs. lead.
 100 powder.

HARDWARE.

6 doz. enamel mugs.
 6 doz. plates, tin.
 4 doz. pans, oval, cooking.
 4 doz. flagons, assorted.
 4 doz. knives, sealing.
 4 doz. knives, snow.
 4 doz. knives, pocket.
 1 doz. files.
 1 doz. files, saw.
 6 doz. spoons, iron.

MISCELLANEOUS.

20 gross matches.
 $\frac{1}{2}$ lb. needles, gloves.
 $\frac{1}{2}$ lb. needles, sewing.
 3 doz. combs, dressing.
 3 doz. combs, small tooth.
 6 doz. thimbles.
 3 doz. mirrors, small.
 2 doz. pipes.
 6 doz. pencils, lead.
 1 gross, thread linen, reels.
 16 lb. beads, assorted.

CLOTHING.

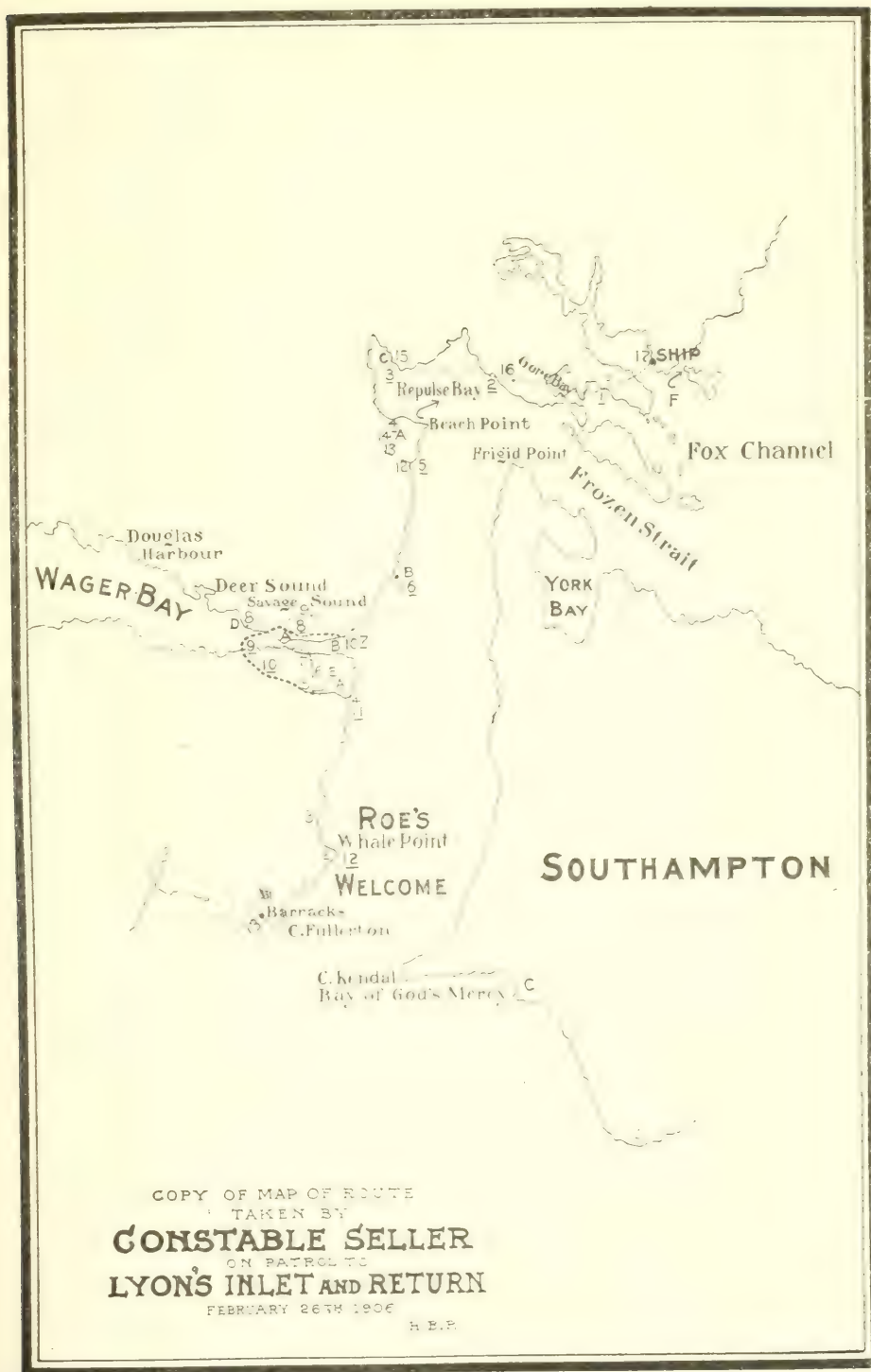
4 doz. drab mole trousers.
 4 doz. drab mole vests.
 5 ends wool tartan.
 8 ends indigo prints.
 4 doz. swan drawers, mens.
 3 doz. shirts, tweed, mens.
 3 doz. sauson shirts.
 3 doz. caps, cloth, mens.

I, J. W. Murray, master, solemnly declare upon oath that the above is, to the best of my belief, a complete list of stores and supplies taken on board the *Ernest William* from the ss. *Active* for use in trading with natives.

Sworn before me this 29th day of March, 1906.

(Sgd.) L. E. SELLER, Const.,
 Acting Assistant Collector of Customs.

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APPENDIX O.

REPORT OF INSPECTOR D. M. HOWARD, HERSCHELL ISLAND.

HERSCHELL ISLAND, May 3, 1906.

The Commissioner,
R. N. W. M. Police,
Regina, Sask.

SIR,—I have the honour to forward this my report with regard to the state of the ships' crews now wintering at this place. After seeing the mail off for Dawson, I returned to Herschell island by dog team, taking Sergt. Fitzgerald with me, I arrived at Herschell island on April 16, 1906, and put up on one of the ships. Finding that Rev. Mr. Whittaker, who had lost one of his children during my absence, intended to go to Macpherson, I made arrangements to use the house occupied by him pending instructions from you as to whether you had been successful in purchasing it, at the same time I took over what supplies he had on hand, replacing them by an order on our supplies at Macpherson, and paying for those I could not replace. The supplies above what we required for our own use, I distributed among the different ships.

There have been no deaths and no cases of serious illness amongst the crews up to this date, one man on the *Korluk* had an attack of scurvy, but is now recovering. At this date the crews are in good health, and the ships have enough supplies to last them until the arrival of the tender. I supplied the doctor with what medicines I could from my medicine chest. The last accounts from Baillie island (March 15), state that at that time all the men down with scurvy were getting on well. These ships have sufficient supplies to last them until the arrival of the tender. There has been only one death among the men there during the winter, a boat-steerer of the *Narwhal*, named Thomas Westway, dying from consumption. The schooner *Olga* has not been seen since last September, when she was in the neighbourhood of 'Banks Land.' The general opinion amongst the captains here seems to be that she will turn up in the summer, but is wintering too far away to communicate with the other ships. It will be impossible for me to be at Macpherson in July, when the *Wrigley* arrives, but I have made arrangements for the forwarding of men and supplies from that point with Mr. Firth, of the Hudson's Bay Company, when the river opens. I would like to call your attention to the fact that so far I have not received my commission as a Commissioner of Dominion police, giving me magisterial authority in this district.

This places me in a very awkward position as far as my work here is concerned. I will try to get a later report up to Macpherson from this place in time to meet the July boat.

I have the honour to be, sir,
Your obedient servant.

D. M. HOWARD, Insp.,
In Charge of Herschell Island.

HERSCHELL ISLAND, May 27, 1906.

The Commissioner,
R. N. W. M. Police,
Regina, Sask.

SIR,—I have the honour to forward this report up to the end of May on the condition of the whalers now wintering at this point. At this date the men of the ships are all in good health and the captains have sufficient food to last them until the

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arrival of the tender. During the last month the deer meat has come in in large quantities and the ships have now all got a reserve supply sufficient to last them. Word has been received from Baillie island dated May 18, and as the captain (Leavitt), does not mention anything about scurvy, it is to be presumed that the men have recovered and are now all right. The ships expect to get out from here about July 6, and will come back about August 10, to meet the steamer carrying in supplies. I have made arrangements to send Sergt. Fitzgerald on one of the steamers so that he may report on Baillie island.

I have the honour to be, sir,

Your obedient servant,

D. M. HOWARD, Insp.

The Commissioner, R.N.W.M. Police,
Regina, Sask.

HERSCHEL ISLAND, August, 1906.

SIR,—I have the honour to forward the following report on conditions at Herschel Island:—

The vessels wintering here last winter were the *Bowhead*, *Alexander*, *Jeannette*, *Thrasher* and *Karluk*. The crews are composed of a very mixed lot of men, although nearly all are American subjects; they are of different nationalities: American, Portuguese, German and Scandinavian, and are a very rough lot. Most of the ships have one or more men who have 'done time' in prison for different offences. There are a few of the better class mixed among them who have had some education, but the general run are very rough. Owing to the way these men are engaged, the feeling between the officers and crews is not of the best, and ships very seldom get the same men twice. The men do not receive regular pay, but are engaged for the voyage on a lay (a certain percentage or share of the catch). A man's lay is a very small one, and at the end of two years it is not often they have anything coming to them after paying for their clothing from the ship's stores. When they engage they fancy they can easily come back to San Francisco with five or six hundred dollars in their pockets for the voyage; and naturally when they find they have worked for nearly two years and have nothing coming to them at the end of that time, they are very much dissatisfied, and do not work willingly, but are inclined to give all the trouble they can. They have given a certain amount of trouble during the winter, complaining of their rations. The crew's time on the *Bowhead* was up last March, and they refused to work, and complained. I told them they would have to work the ship back to San Francisco, and explained to them the exceptional conditions they were under, and that the courts in San Francisco would look into their case, and award them whatever wages they were entitled to for the time they were forced to work after their time was up. They then said they would work the ship home, but would not go from here to the eastward to meet the ships at Baillie island or whale on the way there. I explained to them that it was necessary for the ship to proceed to that point to procure flour enough to last them until the end of August, when the tender would arrive, and they only had flour enough to last them until the end of July. The captain offered them \$20 a month, clothing and tobacco, and a share in anything they might take while proceeding to the eastward, but they would not accept it, and served the captain with a protest, signed by all the foremast hands, refusing to get wood or whale. These men complained that they were physically unfit to do the work (they had done no hard work during the winter). The captain had them examined by the doctor, and he pronounced them in excellent condition, except cases of men with chronic disease, mostly syphilis. I took the evidence of the officers and the doctor, and examined the rations, and refused to interfere. The men have been in no way starved this winter; they have had a very fair daily ration, and there is no case of illness amongst them that can be attributed to shortness of rations. The cases of illness now on ship can be attributed

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to accident or old complaints of long standing. There had been no deaths among the crews up to this time, which in itself speaks well for the rations and treatment they have received. They complained of ill-treatment when on the high seas, and sent letters out by me in February, but there has been no case or complaint made to me of men being abused here, and they have been fed as well as it was possible. Besides the salt meat, fresh fish and wild fowl (ducks and geese) they began to get in May, they have had, during the winter, fifty thousand pounds of deer meat.

When the captains were caught here last winter, they divided all the stores and made arrangements to procure deer meat during the winter, hiring natives with their dogs and sleds, and feeding their families on the ships when they were out in the country hunting. Captains Tilton and Newth were appointed to look after the dogs and natives getting the meat, and their families were apportioned to each ship for meals, the women living ashore and getting their meals on the ships. The men out hunting also got their meals on the ship when they came in from hunting. In December, Captain McComber had some disagreement with the others, and left the combination, and got his own natives and dogs and sleds and procured his own deer meat. This man is of a curious disposition, and apparently could not get on with any one for any length of time. Corporal Haylow had some difficulty with him in December when collecting some duty, as he refused to pay duty on some rifles he had for trade purposes. Captain Tilton, of the *Alexander*, took over the rifles from him and paid duty on them himself to save trouble. In April last, Captain McGregor, having got a supply of meat ahead, left the combination. The trouble arose when he refused to let Captain Tilton have his dogs to procure meat, and Captain Tilton told him he could not supply him with meat unless he had the use of the dogs. I settled the dispute, Captain McGregor turning over his dogs, and getting his meat at about 10 cents per pound, which was about the cost of procuring it. This dispute made Captain McGregor bad friends with the other captains. It happened that amongst the foremost hands of Captain McGregor's crew one was a doctor, and he had been attending the crews of the other ships, the captains having made an agreement with him to pay him so much a season. Captain McGregor forbade the doctor to go to the other ships, and sent a notice to the other captains that they would in future have to pay 30 pounds of meat per visit. This was practically depriving the ships of the doctor's services, as no ship could afford to pay meat for his visits. The doctor deserted the ship, and joined another, the *Alexander*, and continued to visit the ships as usual. Captain McGregor wanted me to arrest the doctor and put him back on the ship. I refused to do this, pointing out to him the foolishness of his action in trying to deprive the other ships of the doctor's services. He also wanted me to see that he got his meat as usual, and I settled it as previously stated.

On my return to the island in April, I found Mr. Whittaker, who had just lost one of his children, preparing to leave the island, and made arrangements to take over his quarters and what stores he had. This helped me greatly, as there were no quarters for us on the island, and we were unable to bring sufficient supplies to last us, on the dog sleds.

I have been in an awkward position, not having received my commission as a magistrate for the McKenzie River district, but so far have managed without any trouble, and expect it will arrive with the Steamer next month. (*Note.*—Since writing this, it has arrived from McPherson.)

I think we should have a strong detachment at this point, and also at Baillie Island, as they are both important points, ships wintering at both places.

I tried to arrange with the captains to take Sergt. Fitzgerald to Baillie Island, but was unable to do so. Next year I fancy I will have no great difficulty. I fancy it was the shortness of supplies that prevented the captains from taking him. It is necessary to assert our jurisdiction over this northern coast line as the Americans seem to have a very hazy idea of the boundary here. One of the officers told me that he thought it was a great pity that at the time of the boundary award the United

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States did not claim all the land about the Arctic coast and hold it, and then there would have been no trouble with regard to customs, &c. There has been no liquor given to natives at this point during the winter, the ships not having it, and no trading, owing to the ships having to use their trade articles, calico, flour, &c., to pay the natives hunting for them, and feeding families during their absence.

With regard to immorality, the customs of the Esquimaux lend themselves very easily to that sort of thing. They think nothing of immorality among themselves, men often changing wives for hunting trips, and even when at home. Of course a certain amount goes on amongst the women of the beach one way and another, but there has been no case of any women having been ill treated or abused. Hardly any of these natives belong here, but come over from the American side. Most of the captains bring in women from the American side and take them back when they go out. These women live on the ship and make skin clothing for the crew during the winter.

I have heard nothing from Baillie island since my last report I sent out to meet the steamer at McPherson. The whereabouts of the schooner *Olga* is still unknown. Some of the captains think she will turn up in the spring all right, others are of the opinion that she is lost.

QUARTERS.

If we succeed in purchasing the buildings we are now in, they would be large enough for a detachment of six or seven men and a sergeant, and cells could be fitted up by carpenter of ships wintering here. The climate is severe, but with the quarters we are in now, we will be able to make ourselves comfortable for the winter, if we are able to secure some coal from the ships.

Capt. McGregor turned a negro hand belonging to his ship loose on the beach last April, and said he was afraid of him when I spoke to him about it. This negro had stabbed one of the crew in a fight during the winter of 1904 when Sergt. Fitzgerald was here, and had been in irons on the ships, but the captain had turned him loose. I had him arrested and taken on board and handed over to Captain McGregor, who took charge of him and confined him. We have no way at present of confining and feeding a prisoner and I could not allow this man to run on the beach and become a charge on us when the ships left. Capt. McGregor complained to me just before the ships left that he had had some native boots stolen from his ship and sold on shore. I made inquiries and found that Captain Newth had bought these boots from one of Capt. McGregor's crew who told him he had won them in a poker game. I saw this man and found out that he had got them from Capt. McGregor's son, who had stolen them from the ship's stores. I got the boots from Capt. Newth and returned them to Capt. McGregor, he returning the money Capt. Newth had paid for them. Naturally he did not wish to lay a complaint against his own son.

I have travelled this winter with dogs, seven hundred and eighty miles, making the trip from McPherson and back in February and coming down again in April. This entailed a good deal of exposure in a climate like this without tent or stove, and one robe each instead of blankets. We had not room on the sleds for any of these articles.

WHALING.

The whaling season in these waters is a short one, lasting from about July 10 to the end of August or early in September. Whaling in these waters dates from about 1879, when there were two or three vessels engaged in the business. These have increased from time to time. (I forwarded a list of the vessels with names of captains and crews last March.) The captains and mates of these vessels are Americans. The crews are made up of a very mixed lot of many nationalities, many of them are not sailors at all, and have never been to sea before signing on, some are men who have come to sea to get away from the drink habit, and a few of the men in the vessels now here have done time for some offence in the United States.

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These men have a bad influence on the better men. Altogether they are rather a rough lot, and require to have a firm hand over them to keep discipline amongst them. These men are engaged on lays, or shares in the catch during the voyage. These lays are graded from the top. The different lays, as near as I could find out are captains, $\frac{1}{5}$ to $\frac{1}{15}$; 1st mate, $\frac{1}{18}$ to $\frac{1}{25}$; 2nd mate, $\frac{1}{18}$ to $\frac{1}{30}$; 3rd mate, $\frac{1}{30}$ to $\frac{1}{50}$; 4th mate, $\frac{1}{40}$ to $\frac{1}{60}$. Boat steads and boat steers about the same as 3rd mate. Seamen, $\frac{1}{170}$ to $\frac{1}{200}$. The men's lay is a very small one, and it only a very lucky season that they earn enough to pay for the advances given them before sailing and their account owing to the slop chest of the ship for clothing. Whales are now killed with bomb guns consisting of a stockless gun barrel which holds the powder and bomb attached to the harpoon in such a manner that on striking the whale, the bomb is discharged, driving the iron further into the whale, killing it. The whale is then brought alongside, hoisted on to the ship and cut up, the blubber boiled for oil, and the bone extracted from the head, washed, and tied in bundles. The price of the oil and the bone varies, being regulated by the supply and demand of the market in San Francisco. The head of the whale yields from 2,000 to 2,500 pounds of bone, and the average whale varies between \$10,000 to \$12,000 in bone and oil. The catch varies very much from year to year, the seasons being regulated by the movement of the ice and whales in the arctic. A successful season may be followed by a very poor one and visa versa. It is almost impossible to tell at the commencement of a season how it will turn out. There is also a great difference in the luck of the different ships, some will be very successful, while others will come out with nothing. The amount of money yearly taken out by these whalers is very large, all going to San Francisco. I think this industry should be well worth the attention of vessel owners in Victoria and Vancouver who are so much closer to the whaling grounds. Having a ship, the cost of fitting out for whaling should not be very large.

I have the honour to be, sir,
Your obedient servant,

(Sgd.) D. M. HOWARD, *Insp.*

ROYAL NORTHWEST MOUNTED POLICE,
HERSCHELL ISLAND, August 26, 1906.

The Commissioner,
R. N. W. M. Police,
Regina.

SIR,—I have the honour to report that whale boat belonging to ss. *Alexander* arrived at 12 last night and reported the ss. *Alexander* lost on reef at Cape Pony. She ran on reef in fog at 6.55 a.m., of August 13. They had only time to get away in the boats before the ship broke up and lost everything. They had time to provision the boat to take them to the island, and I am giving them what I can from our stores to take them to Point Barrow, when they will be able to get sufficient supplies left by the tender. Whatever I let them have I will show on special ration issue. The remainder of the boats, five, turned up during the day, and no lives have been lost.

This ship was owned by H. Liebig & Co., of San Francisco.

I have the honour to be, sir,
Your obedient servant,

D. M. HOWARD, *Inspector.*

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APPENDIX P.

ANNUAL REPORT OF SUPERINTENDENT C. CONSTANTINE, LESSER
SLAVE LAKE.

ROYAL NORTHWEST MOUNTED POLICE.

LESSER SLAVE LAKE, October 31, 1906.

The Commissioner,
R.N.W.M. Police,
Regina.

SIR,—I have the honour to submit herewith my annual report of 'N' Division for the year ending October 31, 1906.

The year just completed has been one of continued prosperity in almost every district which this division covers, extending as it does from Athabasca landing, north-east as far as Lake Athabasca, and west from that point to the Rockies. This immense area is for the most part entirely uninhabited, except, of course, for the bands of Indians, who live entirely on the proceeds of their hunting, bringing in their fur to the different trading posts which are scattered freely all over the country at points usually accessible from the outside, which enables traders to bring in their merchandise and to carry on the immense fur trade for which this country is so well known. The yield of fur in this district this year has been exceedingly good, and much money has been earned by the native trappers, the prices, I understand, have, in some lines of fur, been exceptionally high, and so both the traders and the trappers may be said to have done well, as far as the latter are concerned, in many cases I fear they have done too well. The Indian, as a general rule, has no thought or idea of saving or preparing for a bad season, and their prosperity of the past few seasons has the effect of making them utterly indifferent to anything during the summer months, and in consequence the freighting and boating interests frequently suffer much.

The crops have been good (where cultivation of land is attempted), Lesser Slave lake, Peace river crossing, and Vermilion, being the only points where farming to any extent is carried on, Lesser Slave lake (which includes Prairie river and Salt prairie settlements) has had a very good season indeed, although at one time we were threatened with drought. Harvest was well through by the middle of August, good barley, oats, and some wheat have been grown and fortunately have not suffered from the frost, which in past years has been so prevalent during the summer months. The farmers at present around Lesser Slave lake, however, do not cultivate grain to any great extent but rely on their stock and hay crop as their principal means of livelihood. The hay crop this year has been the best for a number of years, and fine hay is to be had reasonably everywhere. The male portion of the community here earn a good living during the summer months by working for traders, freighting, and on the rivers where an immense amount of freight of all sorts is constantly coming in to the country from Edmonton.

At Peace River crossing a good season has been experienced, the largest individual yield of wheat being about 1,600 bushels, the output from the whole settlement being close upon 10,000 bushels of wheat and oats, this considering that there are but a dozen or so who attempt grain raising is a very fair result. All the grain is grown on the north side of the Peace river and about 10 miles from the police detachment, the Roman Catholics and English missions, A. L. Brick, M.P.P., and W. H. Carson, J.P., have their farms here. Hay at this place except actually near the missions, is scarce, and we have to pay \$20 to \$25 a ton for that used at a detachment which is brought across a very bad road some 25 miles from Little Prairie. The country northwest of Peace

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River crossing, which for a great number of miles is rolling prairie, has this season been parched up, practically no rain having fallen, and the creeks and small rivers have been almost all dried up, hay is therefore scarce.

Garden produce both at Lesser Slave lake and Peace River crossing this year has been disappointing owing to the early ravages of the cut worm. Good crops of potatoes and other cereals have been seen, but as a general rule garden vegetables have been a failure. At Vermilion (some 300 miles below Peace River crossing) where there is the largest settlement there has been a good season, and some excellent crops harvested, the yield of wheat is placed at about 20,000 bushels. This wheat is bought as a general rule by the Hudson Bay Company who also buy that at Peace river crossing, converting it into flour at their own mill at Vermilion where the price landed is \$1.50 a bushel. the Vermilion district, like Peace river, has been immune from summer frosts this season.

The navigation on the Peace this summer has been general though the river is considerably lower than last year, the Hudson Bay Company's steamer made three trips from Vermillion to St. John's and back, a distance of over 500 miles, on one occasion going up as far as Hudson's Hope. The Roman Catholic steamers *St. Charles* and *St. Joseph* have also made several trips taking up both freight and passengers to Dunvegan and St. Johns, and the points below Peace River crossing down to Vermilion, and down to the chutes which is as far as steamers are able to get.

At Spirit river which is a small settlement some ten miles or so south of Dunvegan on the banks of a small river of that name, some very fair crops of wheat, oats and barley have been grown, there are about fourteen white settlers here, Messrs. Brooks and English own the largest farms, the majority of the settlers who are half-breeds raise stock, horses and cattle, which roam at will all the year round, these people leave in the fall going off into the bush for their winter's hunt, in all there are about twenty-five families of half-breeds, and six Indian families at this point.

At Grand Prairie a considerable settlement is springing up, but the inhabitants are mainly those who have migrated from other settlements. This district is one which is commanding a good deal of attention from prospective settlers, it is almost entirely a grazing one, which in a good season cannot be bettered, this year however has been a most trying one, the land being parched up, and I hear there have been a considerable number of prairie fires during the summer. Should this winter prove a severe one I fear there will be a considerable loss among the stock, feed and water having been none too good all summer.

Sturgeon Lake settlement situated at the lake of that name is about ninety miles southwest of Lesser Slave lake, the settlement is chiefly half-breeds and Indians, with a small mission and a Hudson's Bay Company's post. This district is one which is likely to command considerable attention from settlers at no distant date, more especially so as the Grand Trunk Pacific Railway is expected to go through it. I propose to open a detachment here before the winter sets in.

Whitefish Lake is a small Indian settlement with a mission on the shore of a lake of that name about forty-five miles northeast of Lesser Slave lake, the country in all directions is thick bush, there is a trail from this place to Wabiscow which is however a very bad one, the country through which it passes lying very low, it is therefore mostly swamp and muskeg. At all of the foregoing points the traders, viz., the Hudson Bay Company and Revillon Brothers, have posts where a very large portion of the fur is bought and exchanged for the necessities of life.

After leaving Athabasca Landing down the stream the first post of any importance is the Pelican portage situated on the north side close to the mouth of the Pelican river, there are two trading posts here, the Hudson Bay Company and Revillon Brothers, and a small Church of England mission, from six to ten families of half-breeds and Indians comprise the population, and it is from this point that goods are shipped into the Wabiscow country. The country lying between Pelican portage and Wabiscow consists of low lying swampy country with here and there small poplar

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bluffs. When the water is low as it has been the last few years the blue joint grass is most luxurious along the Pelican and Wabiscow rivers, the summer travel between these two places is done mostly by canoe, the summer road is about 100 miles, and the winter road sixty when most of the freighting is done. At this point there is quite a settlement, two large trading posts and Roman Catholic and Church of England missions who have schools, there must be roughly 500 inhabitants in this settlement consisting of whites, half-breeds and Indians, no farming of any sort except a little stock raising is attempted, fairly good garden produce is raised. This country is one of the best fur producing districts, and the inhabitants work on boats in summer and hunt in the winter for their livelihood. The next place past Pelican portage is Fort Mc. Murray. This place is a trading post just above where the Clearwater river runs into the Athabasca. Some years ago the Hudson Bay Company had a fair-sized trading post here, they moved down to Fort McKay some twenty-five miles below, but I hear that they are again going to open up a post, as quite a number of half-breeds and Indians are settling there, and quite a lot of trapping is done in the surrounding district. In the event of oil being found here McMurray may become a place of considerable importance. This year there were two outfits at work, one just above McMurray and the other about five miles below on the south side of the river, both outfits had up to date machinery and piping sufficient to bring them to a depth of 3,000 feet.

Considering the hundreds of tons of valuable supplies which annually go down the Athabasca to all points as far as the Arctic ocean, it is remarkable that no other means have been employed than those at present in use, namely running scows down the rapids from the Grand to Fort McMurray, the distance between these points is about eighty miles and is one succession of dangerous rapids. This year there was exceptionally low water, and boats were continually being broken against the rocks and thousands of dollars worth of freight destroyed. A cart road could be cut from House river, four miles above Grand Rapids to McMurray. I do not know what the distance is but there is a pack trail at present and a good man can make it in a day and a half on foot, and I am told excellent feed can be obtained along this trail.

The next place of importance is Fort Chipewyan situated at the southwest end of Lake Athabasca. This is one of the oldest trading posts of the Hudson Bay Company and there is a considerable settlement of Indians and halfbreeds. The Roman Catholics have a large mission and convent and about fifty Indian and halfbreed children are educated at the school. A police detachment has been here for some years consisting of a non-commissioned officer, 1 constable and a special constable, interpreter. Hitherto the detachment has been housed in quarters rented from the Hudson Bay Company, but this year authority was obtained from you to build a detachment building, a good site has been procured at the back of the Hudson Bay Company's fort overlooking a portion of the lake, quite a lot of clearing had to be done. When Inspector West passed through in the early part of August the logs were laid to the square building, work was proceeding, and all the material with exception of about 1,000 feet of flooring had arrived from Edmonton, this had been shipped in but had been smashed up in the Grand rapids, the contractor however has promised to replace this lumber later this fall, and doubtless it has ere this arrived. The members of the detachment were in good health and Constable Wakefield accompanied the Treaty Party No. 8 to Fond du Lac and returned, and Sergeant Field accompanied the party to Fort Smith, Smith's landing and Hay river. Patrols are made in winter from this detachment to the following points, Fond du Lac, Fort Resolution and Hay river. Smith's landing is situated about ninety miles north of Fort Chipewyan on the Slave river which is a continuation of the Peace. From this point to Fort Smith, a distance of sixteen miles, goods have to be taken by wagons across the so-called Smith's portage or down a succession of dangerous rapids. The Hudson Bay Company have transport in the way of oxen and carts and a number of half-breeds who have settled at this point have horses and wagons, and make their living by freighting over this portage in summer, and trapping in winter. The traders, viz.:

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Messrs. Hislop & Nagle, and Fulke & Swiggert take most of their goods via the rapids, and they employ a large number of the natives for this purpose, but latterly Hislop & Nagle have been employing white men, engaging them in Edmonton for the summer's work, this plan has been found to be far more satisfactory as the men are under contract and receive their wages after the season's work is over, whereas the halfbreeds and Indians start in debt, are always demanding higher wages, and often are known to desert thereby causing considerable delay and extra expense. I am of the opinion that a detachment stationed at this point would put a stop to these breaches of contract.

Smith's landing and Fort Smith are general trading posts of the Hudson Bay Company, Hislop & Nagle and Fulke & Swiggert and Ben Hursell. There is a small Roman Catholic mission at each and roughly 500 halfbreeds and Indians live in the neighbourhood.

It is in the country between Fort Smith and Peace point, on the Peace river, that the buffalo have their range. Wolves are reported as becoming very numerous all over the country here, and it is supposed that for this reason the buffalo are not increasing, but no doubt now that the bounty has been increased to \$10 this pest will eventually be got rid of. Sergeant Field this year paid \$150 in \$10 bounties, he expects that in the coming year this will be greatly increased as the wolves are hard to kill, and the Indians hardly thought it worth the trouble to go after them for \$5 per head.

It is rumoured that a narrow gauge road is to be run between Smith's landing and Fort Smith, and I hear that the contract for the tie tender has been let, this will greatly facilitate the transportation of goods into the northern country and be the means of saving a large quantity of valuable goods from being damaged, and should lessen the freight rates.

SUMMARY OF CRIME.

The districts of this division have been singularly free from crime of all sorts, The Indian among his own surroundings, away from the white man and the half-breed is as a general rule a most law abiding person, and has much respect for a representative of the law. I am glad to say that the white settlers, of whom there are not a great many, are for the most part very decent men, and the representatives of the big trading firms especially so, and we owe them frequently a great deal for their courtesy and assistance in the execution of our various duties in these parts which often are far from being pleasant. The majority of cases are settled amicably among the parties concerned, and it is not an uncommon thing for the policeman to act as arbitrator rather than in his official capacity. I attach the summerized schedule.

PRAIRIE FIRES.

One conviction only has been had during the past year. In this case a freighter was burning off a certain slough near here where good feed could be had during the summer for his horses, the fire got away and burnt down a shack and contents. The offender was fined, this might have been a very serious case as the fire was in close proximity to the hay land, where a large number of stacks are annually put up, and which had they been burnt would have destroyed the best hay in the district. During the summer many fires have been burning at Grand prairie, and in one of these Revillon's trading post was only just saved. There have been extensive fires in the mountains of British Columbia this summer, and the densely wooded district on the south bank of the Peace in the vicinity of Grand Prairie have been on fire; so dense was the smoke at Lesser Slave lake for some days that the sun was entirely hidden, and it was with difficulty that we could see 100 yards outside the barracks.

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ASSISTANCE TO OTHER DEPARTMENTS.

We are called upon very little to perform work for other departments so far in this division, this is owing to the country not having yet been opened to settlers. The Indian Department perhaps comes to us more than any other. Escorts have been provided for the treaty payment party No. 8, as usual, and there have been very few points in these districts where the police have not been represented. We do some work for the Dominion Lands and Timber Department of the Department of the Interior, too, but this does not amount to very much at present owing to the absence of settlers. Collection of customs does not affect us for the same reason, and I suppose will not until the country is opened up by a railway, entry of stock under the present conditions is well nigh impossible.

JUSTICE.

We are fortunate not to require the extreme resort to justice. What few minor cases come to our notice are easily disposed of by Justices of the Peace. It would be a good thing if a few more gentlemen could be induced to accept commissions. Owing to the great distance to be travelled to obtain the services of a Justice of the Peace when they are so few and far between, is a great deterrent to a constable to do his duty. We have, I believe, only four Justices of the Peace in the whole of this vast country. Two are at Vermillion, 1 at Peace River crossing, and (outside the force) there is not another till you reach Chipewyan, where one of our own men was last year appointed to this office. Until more people come into the country I fear things will be as they are, as the white men are almost all traders and wont accept the appointment, as it affects their trade.

GUARD ROOMS AND COMMON JAILS.

Outside of the detachment lock-ups there is no common jail in this district, and serious offenders have to be taken to Edmonton or Fort Saskatchewan guard-room. We are, however, able to keep short sentence men both here and at Chipewyan, where we can put them to all sorts of labour. It is, however, a rare occurrence for us to have a prisoner.

Crime.	Cases Entered.	Con- victions.	Dismissed, withdrawn or not tried	Remarks.
Offences against the person—				
Assault.....	2	2		
Offences against N.W.T. Ordinances—				
Masters Act.....	2	2		
Liquor in possession in prohibited territory	4	4		
Prairie fire ordinance.....	1	1		
Brand ordinance.....	1	1		
Insanity.....	2	1	1	Died before action taken.
Offences against property—				
Maiming a dog.....	1	1		
Offences against religion and morals—				
Drunk and disorderly.....	1	1		
Offences against the Indian Act—				
Supplying liquor to Indians.....	1			
Prostituting Indian woman.....	1		1	
	16	13	3	

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DISTRIBUTION.

Station.	Superin- tendent.	In- spectors.	Staff Ser- geants.	Ser- geants.	Cor- porals.	Con- stables.	Special Con- stables.	Total.
Lesser Slave Lake.....	1	1		3	1	7	2	15
Peace River Landing.....			1					1
Fort Chipewyan.....				1		1	1	3
Fort Graham (Peace Yukon Trail).....		1		1	2	11	1	16
Discharged.....							1	1
On transfer.....						5		5
	1	2	1	5	3	24	5	41

AGRICULTURE.

Agriculture may be truly said to be in its infancy, although in places cultivation has been going on in a small way for years. That there is excellent land awaiting the husbandman there is no doubt, and any quantity of it, labour, perseverance backed by capital, will solve the difficult problem of the Peace River country without a doubt, and at no distant date.

CUSTOMS.

As stated previously all customs dues are collected in Edmonton.

INDIAN DEPARTMENT.

The Indian Department have more to do with this country than perhaps any other department of the government. This country may truly be styled the Indians and half-breeds 'Paradise.' The work occasioned by the few bands of Indians up here (outside of the treaty) cannot amount to a great deal, as there are but few reserves and no resident agents at all, the whole country therefore is one immense reserve. The Indians are for the most part well to do, and it is seldom that cases of destitution come to our notice, there are usually relieved by us, after inquiries have been made. The Indians on the Lesser Slave lake reserve have this year been supplied with machinery and have put up a good lot of hay to winter the government stock.

PROVINCIAL GOVERNMENT.

With the exception of a few grants of money to be spent on the roads, and a ferry across the Peace at Peace River crossing, we hear but little of the provincial government, and the member has not yet been up since his return to the House. We so far do not perform any duties for the Department of Agriculture as is so usual in other divisions. The census has been taken this summer but no details have yet been published.

STATE OF THE INDIANS.

The annual payments of treaty No. 8 were made at Fort St. John, Dunvegan, Peace River crossing, Vermilion, Little Red river, Chipewyan, Fond du Lac, Fort Smith, Smith's landing, Resolution, Hay river, Fort McMurray, Wabiscow, Whitefish lake, Sturgeon lake and Lesser Slave lake. The general health of the Indians is good with the exception of the Beaver Indians who are decreasing rapidly with scrofula and consumption. A few old people, too feeble to hunt, at different places, are housed and fed at the Roman Catholic or Church of England missions, provision by the Indian Department being made for them, but with these exceptions the Indians are in a prosperous condition throughout the country, fur of all descriptions being plentiful and the prices high. Word came to hand last winter that the Indians at Fond du Lac

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on Lake Athabasca were in a starving condition, but these reports were greatly exaggerated. It is true that very few cariboo were killed in comparison with other years, but most of the Indians had lots of fish, those who had none put up got them from the Roman Catholic mission and the Hudson Bay Company, the Indian Department defraying the cost.

This year they were cautioned against depending upon the cariboo for their support and were instructed to put up lots of fish, nets being supplied to them for that purpose. They are a law abiding lot, and no infringement of the law was brought to our notice. They have a wholesale dread of the police and give no trouble, but as civilization grows northward the half-breed element has to clear out; they will mingle with the native more and more and I fear the cunning of the Indian, and the villany of the low class white will demoralize the existing conditions to a considerable extent, and we shall be more than ever called upon to exercise our prerogatives for the maintenance of law and order.

DRILL AND TRAINING, MUSKETRY, ARMS, ETC.

The division being scattered over so great an area it is impossible to get the men together. The large portion of the division consists of the Peace Yukon trail cutting party, so no drill or training is attempted. The division is armed with the old Winchester rifle which is quite good enough for our requirements in these parts, the revolver in use is the New Long Colt, they are excellent weapons.

CONDUCT AND DISCIPLINE.

The conduct and discipline of the division has been excellent during the year and no cases of a serious nature have been brought up.

HEALTH.

The health of the division has been very good indeed, the only case of prolonged sickness being that of Reg. No. 4279, Constable Clay, S.G., who was stationed all last winter and early summer at Fort Graham, this constable was brought to headquarters suffering from sciatica, since he has been here he has recovered I am glad to say. One or two accidents from axe wounds have occurred on the Peace Yukon trail, these though severe at first have got quite well again. The rest of the division have enjoyed the best of health.

TRANSPORT, HARNESS AND SADDLERY.

The transport in this division is in good order, some painting will require to be done in the spring. The harness both here and at Peace River landing are in good repair. At Chipewyan dogs only are used. The canoes of the division also require painting and overhauling.

CANTEEN AND RECREATION ROOM.

None have been started in this division so far. I would ask that the division be supplied with the usual illustrated papers and periodicals.

STORES.

The division this year has been rationed under contract by the Hudson Bay Company and the quality of the stores are excellent.

SETTLERS.

A few settlers have come in during the year, and some have left for the outside. A considerable number of persons have been looking over the country.

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LIQUOR.

There have been four convictions for illicit liquor during the year. With the present system of liquor permits it is very hard to ascertain who is bringing liquor in, there being so much freighting to keep a check on and so few men at command to do the work. The lake being so low has also been against patrol work on the lakes and rivers during the summer.

PATROLS.

Local patrols have been made in various directions from the detachments.

TRAILS.

Considerable work has been done on the trails around this district. A trail has been cut along the Little river, and I am informed that one will be cut along the north bank of the Athabasca from Athabasca landing where a ferry has been put on this season. A branch trail is to be cut to Wabiscow.

GAME AND FISH.

Game has been plentiful. Fishing is done locally for home consumption by the natives, and others. I understand that the fish company intend carrying on operations this winter at the nine mile point. The catch here is shipped out.

DETACHMENTS.

The headquarters of this division are at Lesser Slave lake and the detachments are at Peace River crossing and Chipewyan, and the party working on the Peace-Yukon trail at Fort Graham. New detachments were recommended last year but nothing so far has been done to carry out the recommendation. They were as follows :

Sturgeon lake, 2 constables and 1 interpreter ; Spirit river, 1 non-commissioned officer, 3 constables and 1 interpreter; Vermilion, 2 constables and 1 interpreter; Fort Resolution, 1 non-commissioned officer, 2 constables and 1 interpreter ; Fort Chipewyan to be increased by 1 constable.

BARRACK BUILDINGS.

The barracks at Lesser Slave Lake have been completed since last year's report and are well lighted and commodious, and will house about fifteen men at a pinch. A storehouse, now that this has become headquarters is badly needed, also a wagon shed. As before mentioned new barracks have been erected at Chipewyan and should ere this be completed, the lumber to build this place was taken in from Edmonton. The building at Peace River crossing is in good repair and is most comfortable. The Peace-Yukon trail party will be split up this winter at three different camps where log huts have been built, these camps are some few miles apart, this is owing to the hay being put up in three separate localities there not being sufficient in any one place to winter the horses.

HORSES.

The horses of this division have for the most part been in good order and condition during the past year with the exception of those of the Peace-Yukon trail which for want of good hay and water suffered considerably last winter, the following horses died; horses Reg. Nos. 11, 19, 144, 206, 41, 63, 21, 35, 54, 65 and 145. Horse Reg. No. 36 is missing and pony 167 was sold at Lesser Slave Lake. Besides these horses Reg. Nos. 12, 14, 18, 57, 60 are lost and missing on the trail between Peace River crossing and Fort Graham. Inspector Camies also reports that horses S. 34 and 43 were obliged to be abandoned before reaching Fort Graham this late summer. I expect however that some of the missing horses will be found later ; five are known

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to be alive. The total is 71. Fourteen horses were purchased in Edmonton in January, 1906.

DISTRIBUTION.

Station.	Horses.			
	Saddle.	Team.	Ponies.	Total.
Lesser Slave Lake.....	37	3	2	42
Peace River Crossing....	2			2
Fort Graham.....	15	1	3	19
Dead, not struck off.	3			3
Missing on trail....	5			5
Total.....	62	4	5	71

GENERAL.

Inspector West has as usual been away from the middle of May to the end of September with Treaty Party No. 8. Inspector Richards has gone out, his place being taken on the Peace-Yukon trail by Inspector Camies in July last. A. A. Surg. Donald also went out, coming down in May from St. Johns, B.C. A. A. Surg. Genest, L.A., took his place, but owing to lack of transport was unable to join the trail party, getting no further than St. Johns. He has since been ordered out. Five constables who have completed two seasons' work on the trail have gone out and two N.C.O.'s and one constable have been transferred during the year: all of these were from the trail party, 1 N.C.O. and 3 constables were transferred to the trail party. Outside the trail party 1 constable has been sent out on transfer. He has since left the force.

In conclusion, I should like to place on record my appreciation of the way in which the work has been done and the hearty co-operation there has been from all ranks. My report on the work of the Peace-Yukon trail party is attached hereto.

I have the honour to be, sir,

Your obedient servant,

C. CONSTANTINE,

Commanding 'N' Division, Mackenzie District.

APPENDIX Q.

ANNUAL REPORT OF SUPERINTENDENT C. CONSTANTINE. PEACE YUKON TRAIL.

LESSER SLAVE LAKE, October 31, 1906.

The Commissioner.

R.N.W.M. Police.

Regina.

SIR,—I have the honour to submit the following as my report of the Peace River-Yukon trail for the year ending October 31, 1906.

As reported in my Annual Report of 1905, after seeing the trail party safely into their winter quarters at Fort St. John, B.C. (the party arriving from the Trail on the afternoon of September 25, 1905), and having given my final instructions to Inspector Richards, I left in the a.m. of September 26, 1905, with Sergt. Holt, F. J., Const.

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Lattimore, A., and Spl. Constable Bellerose, J., for division headquarters at Lesser Slave Lake, arriving there after a good trip down the Peace river on the p.m. of October 5, 1905. After attending to a number of official matters at headquarters, I left on October 10, 1905, for Edmonton, duly reporting my arrival there to you.

The party under Inspector Richards' command consisted of 1 officer, 5 N.C.O.'s, 17 constables and 2 special constables, the whole of whom with the exception of 1 corporal and 3 constables wintered in the barracks at St. John, the four men before-mentioned being sent up to take care of the pack ponies which were put on herd about 3 miles distant, where about 125 tons of hay had been stacked and a good corral and shack built by us during the summer.

A few days after I had left, Corpl. McLeod, R.W., with two constables and 3 pack ponies returned from the Trail, they having failed to penetrate to Ft. Graham, as they were ordered to do. This N.C.O., with Constables Mansfield and Clay, were sent out a day or two later endeavoured to reach Graham by river, a guide being specially engaged to assist them, this time they got through and the guide returned to Fort St. John. On October 12, Acting Assistant Surg. Donald, W.B.L. (who I had met at Peace River crossing on my way down) arrived at St. John to attend hospital duties, and quarters were fixed up for him with the Hudson Bay Company. The party were kept busy for some time building a shack for Inspector Richards, a stable and cow-house with small corral, a good-sized water tank, a latrine and wash-house, and improvements to the other buildings, the whole when completed (with the 3 buildings already erected) making a really excellent barracks. About this time Messrs. Bredin & Cornwall, contractors, sent over 16 steers from Grand Prairie, which were to be killed for the winter supply of beef, and 1 cow with calf at foot for the use of the mess. On October 13 Corpl. Lukey, who had been sent to assist Corpl. McLeod and party on their way to Graham, returned to St. John, bringing in a foreigner who was apparently not in his right mind. He had been picked up by them in a destitute condition at Hudson's Hope. This man, who turned out to be an Italian, got quite well again, with good food and clothing with which he was supplied by the members of the party, strangely disappeared just after Christmas and has never been heard of since, although several attempts were made to obtain tidings of him.

The winter passed with little out of the ordinary routine, and the weather for the most part was very mild; the party were actively employed freighting wood and hay to the post and making a number of sleds with which I propose to lift the majority of the stores in the early spring on the ice to a point within a reachable distance from where the party left off trail work in September. Outside of fatigue work I had ordered Inspector Richards, whenever practicable, to hold rides, drills and lectures. The drills and lectures were carried out, but mounted parade was impossible owing to the poor condition of the horses. While this work was going on at the post the men stationed at the herd camp were having a hard time with some of the horses, the hay, of which there was ample if used economically, turned out to be very poor stuff for the most part and water was almost unobtainable nearer than the river, all the sloughs having frozen solid. This, in my opinion, was the chief trouble. The small party were kept at work day and night melting snow for the horses to drink, and it is therefore not surprising that we lost several. The horses, with few exceptions, lost flesh and some became so weak that they had to be lifted up in the mornings. In March I ordered Inspector C. H. West to inspect the post at St. John. He travelled up the river from Peace River crossing. This inspection took over two days; all the horses being seen and reported upon. At this time (April) the horses were slowly on the mend, and enough were in good enough condition to commence to freight the stores to Halfway river. I omitted to mention that in January I despatched from Fort Saskatchewan 12,000 pounds of oats and other stores by Corporal Munroe and party, with fourteen horses, to Lesser Slave lake, with instructions to Inspector West to hurry the oats through to St. John for the use of the pack train before the feed commenced to get good.

This party which left here in charge of Sergeant Wilson, H.A., for St. John on January 19, reached St. John on February 17 after a hard trip most of the way, the

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weather being very cold and stormy across the country from Peace River crossing, going to 63 below zero the second night out from Lesser Slave lake. The oats, however, were just in time to bring the poor and weak horses at St. John round. By the end of April all the stores for the trail party had been successfully hauled and cached at a point on the Halfway river in close proximity to where operations for 1906 were to commence, and a party of men left in charge.

On May 14 the entire party under Inspector Richards left Fort St. John to commence the season's work on the trail. Sergeant Spalding, who had been ordered out, was left with the quartermaster sergeant at St. John to assist the latter with the shipping of surplus stores, &c., for Peace River crossing. Constable Shand, G.H., who had been sick during the winter, was also left behind to go out. A. Assistant Surgeon Donald also went out by the first steamer to arrive at St. John.

During this time I was preparing to leave Edmonton I received my instructions from you re the next season's work, contracts, arrangements, &c., I left Edmonton on June 6, 1906, arriving after a miserable journey (it being very wet) on June 20 at Lesser Slave lake. Before leaving Edmonton I had made arrangements with the general manager of Revillon Bros., Ltd. (our contractors), to make a trip to Fort Graham together, as there were a lot of spoiled stores to be gone over both at St. John and at Hudson's Hope, which we thought could best be gone over together, so I stayed at Lesser Slave lake until the arrival of this gentleman and we made the trip to St. John together, arriving at that place on August 5. Here, according to Revillon's arrangements, a crew was to be awaiting our arrival to track us up the river to Graham. The crew, however, was found to have deserted except two, who I therefore engaged to track me up in a canoe as far as Hudson's Hope where I expected to meet a hired pack train to take me over the portage. I duly arrived at Hudson's Hope and after waiting there for two days was obliged to turn back, no means arriving to take my outfit over the portage, 12 miles. I soon got back to St. John (the stream being very swift here), when I set to work to try and hire sufficient pack horses therewith to reach the trail party. In this I failed, as I refused to pay the sum asked (\$500). There was nothing then left for me to do except to return to Peace River crossing, which I did, arriving back there on August 24, 1906. I was enabled on this trip to go over all the spoiled stores at St. John and Hudson's Hope with the manager of Revillon Bros., Ltd. It will thus be seen that I am not in a position to report upon the work of the trail party from my own observations, but from many reports of reliable nature that I have received, both verbally and otherwise, I am able to give the following :

The work of season 1906-7 commenced at the 92 Mile post west of St. John, to which point the party had cut last September.

The 'Winter Cache' of supplies which as before stated had been brought up from Fort St. John earlier in the year over the ice up the Half-way river was about one mile distant from this spot. The Half-way river at this point is a considerable stream about 200 yards across, no difficulty however was experienced in getting across there being two good sized sand bars in the middle of the stream. The country here is fairly open, being of the nature of flats of considerable area. The entire party assembled at the 'Winter Cache' which I will call Cache 1, and moved it across the river to a point some six miles up, recrossing the stream and making a fresh Cache No. 2. A rest house was built here not far from camp 19 at 97-mile post. The country as far as the second crossing of the Half-way river lies through willow scrub, poplar and spruce with some swampy ground interspersed by small creeks, two of which the trail crosses, then through some heavy spruce out into an open pasture interspersed with small poplar bluffs, the feed and water here are excellent.

Rest House No. 3 is close to the Half-way river and is built in some heavy spruce with scrub to the waters edge. As I before said the trail then crosses the river close to the 98th Mile post where No. 2 Cache was made and a little farther on at 99 Mile post. The trail then goes through some swampy ground past a chain of small lakes which empty into the Half-way river. The timber here is dead standing spruce, there is considerable Beaver work just here. We have now reached the 100 mile post, the

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country is of much the same nature, dead spruce and jackpine with here and there some open patches. We now reach the bank of the Cypress river about 102 miles west of St. John's, all through this piece of country there was but little hard work for the party, the country is a rolling valley interspersed by small creeks which in one or two instances were bridged. I forgot to mention on starting that the party was told off into two gangs, one gang going ahead, and working towards one another. The pack train consisted of Constable Darling in charge with two constables and one special constable, these men had twenty pack horses constantly all summer, their duties were to go ahead and cache the supplies at convenient points, usually ten miles apart. The remainder of the horses were kept in the vicinity of the camps and when not moving camp were sometimes used by the men going and returning from work, the horses which were used for these duties being those who were still in poor condition from the hard wintering and casualties from the pack train.

The crossing of the Cypress was easily made, a large sand bar being in the middle of the stream which is swift and about thirty yards across. There camp 21 was made, and Cache 3 erected, water and feed were excellent, one or two small creeks flow into the Cypress near here, these were bridged. The trail up to the 110-mile post was principally through scrub, close poplar and underbrush, and was not at all difficult to get through, rapid progress being made, there were some swampy pieces here which in places were bridged and brushed. Cache No. 4 and camp 22 were close together. Here we reached the 110 Mile post by June 9, the trail past here went into some burnt pine and swampy ground, with close jack pine, and then through about five miles of heavy spruce and spruce poplar. Rainy creek was crossed near the 112 Mile post and camp 23 was pitched near the 113 Mile post where there was some open country, feed was not plentiful at this point but we were making fair time, although there was some heavy chopping.

The 116 mile post was passed on June 16, here some tamarac and spruce was gone through, the trail from the crossing of the Cypress follows the north bank of that river. Close to the 118 mile post No. 5 Cache was made and at the 122 mile post camp 24 was pitched, the Little Cypress creek, 20 feet wide being crossed, there is a cut bank just past the 120 mile post which was graded by us. The 124th mile post was made by June 23, the banks of the Cypress here right down to the water are continuous spruce, pine and poplar and willow scrub bluffs, with here and there open patches, feed was fair at camp 24.

Camp 25 was pitched about the 126 mile post in country covered by intermittent willow scrub and spruce bluffs, here we erected rest house 4, with good surroundings. Just previous to mile post 129 being reached the north fork of the Cypress is crossed being 15 feet wide with dead spruce and willow scrub to pass through. Just above here there are some small falls on the Cypress river which we pass on our left going ahead to the 133 mile post reached on June 30, the trail passes principally through scrub willow and small spruce and therefore was easy to get over. All along here we have been gradually on the ascent to the summit of the Laurier pass which is reached at mile post 139 where the Cypress river has its source.

We have been from the 102 mile post till now traversing the valley of the Cypress alongside of the creek of that name, the nature of the country to the summit of the pass is entirely through willow scrub and small spruce at intervals, feed gets very scarce through here as we ascend, and summer frosts are almost nightly. We have now reached the summit at the 140 mile post and commence to descend into the Ospica country having White's creek on our left, this is one of the branches of the Ospica. Camp 27 was made near the 143 mile post amongst burnt and fallen timber, feed here was poor. By July 7, we had reached mile post 144 the burnt fallen timber being heavy along here. White's creek was crossed twice between the 145th and 146th mile posts and again before the 147th mile post was reached. There is a little open prairie here with some willow scrub, feed however is poorer and scarcer as we go further west. Horn creek, 60 feet wide, was crossed twice and the 154th mile post reached on July 14.

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The nature of the country through this pass is rough with a considerable amount of deadfall, spruce and burnt timber. There is a small prairie at 154 mile post, feed however is short and frost bitten. Camp 29 is reached at the 156th mile post, where there is a prairie with a good lot of spruce near, the feed is thin and sparse, just past the 157th mile post a branch of Horn creek is crossed at some small falls, the trail follows Horn creek right along here for some miles, in fact almost till the Ospica is reached which occurs at the 173rd mile post, which the trail party reached on July 28.

At this point Inspector Camies reached the trail party and relieved Inspector Richards, the latter returning to Fort St. John as per orders from you.

After crossing the Ospica, which is a considerable stream 200 yards across, the trail commences to ascend to the summit of the Herchmer pass where we pitched our 32nd camp, this was at the 180th mile post, this country is almost all covered with heavy green timber. At Twin Lakes where our camp was, good feed was fairly plentiful, a great deal of chopping had to be got through. This possibly was the hardest work yet, the country for miles being deadfall timber, it is named the Devil's Canyon, and the party moved but slowly. Camp 34 was on a branch of Davis creek and camp 35 at the 206th mile post, also on the bank of a small creek which flows in to the Finlay, Fort Graham was reached by the party on August 11, the last twenty miles being one continuous stretch of spruce, jack pine and burnt upstanding and downfall timber.

Before the Ospica was reached orders were given to three constables to proceed ahead and get into Fort Graham with instructions to Corporal McLeod to commence putting up hay at once. This was done and with the men already at Graham a party of five men were constantly employed, the progress however was slow as the grass had to be cut with the scythe. The principal hay ground was some twenty miles northwest of Graham on the Sylvesters Landing trail where Corporal McLeod made his headquarters, here some thirty odd tons of good hay was stacked, the party then came closer into Graham where another seven tons of fair hay was put up, this done the party came about two miles south of Graham where there is considerable slough land, here a large quantity of hay of poor quality was cut, in all about seventy-five tons, this was accomplished by the end of August, the hay however had not been stacked when it commenced to rain very heavily for about fourteen days, this spoilt the hay, except about fifteen tons, which is just passable.

During the first week in August Messrs. Revillion's scow arrived at Fort Graham bringing up a large quantity of supplies of all sorts. On inspection it was found that a considerable quantity was spoilt.

The main party stayed at camp 35 haying, while others were sent in to Graham to build quarters there. At the same time Corporal Lukey and a small party were sent across the Finlay river opposite Graham to commence the trail which is to be cut towards telegraph No. 4, and a cache of supplies was taken some ten miles out for them, this party found very rough country indeed, far rougher than any yet experienced, the country being rocky with next to no feed and very hilly also with many small creeks. This party cut through about twenty miles of country to a group of small lakes which are named Whitefish lakes. It was then into September so Corporal Lukey and party returned to Graham to assist in putting up quarters which were still in course of erection.

Before closing my remarks on the actual trail work I would call your attention to the distance which the rest houses have been built apart. This country is terribly rough and in parts very hilly, it is therefore extremely hard on pack animals, and especially so as in so many parts the feed is so scarce and poor. I would therefore recommend that just double the number of rest houses be built, that would supply one every fifteen miles. To keep a pack train in good working order in this country fifteen miles is a long day, and therefore should this trail be used by the public a rest house at the distance stated would be a greater convenience. These shacks could be easily built by a party sent out for that purpose later on when it will be necessary

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also to do a great deal of clearing, as the country is constantly being burnt over, and the trees keep on falling across the track. I might here mention that on the trail cut last year between the 32nd and the 45th mile posts in the Cache Creek district the trail has been completely obliterated, a fire having swept over the entire country, the trail is covered many feet deep in burnt timber which keeps on falling, Corporal McLeod and party had quite a job to get through, he however blazed the trail, and Constable Mansfield and his party had no difficulty in getting through after him. The length of trail cut this season between the end of May and the first week in September was 135 miles, this considering the very heavy work entailed is a most creditable performance. Taking this portion of the trail and comparing it with that portion got over last year, however, the work has not been so heavy, the work this year consisting to a great extent of chopping and pulling deadfall out of the way, that of last year being a preponderance of digging and grading with quite a lot of bridging, this was principally due to the very deep creeks which run into the Peace river and which had to be graded down one side, the crossing made and then a steep ascent to the top, some of these grades being fully 800 feet deep.

STATE OF THE HORSES.

As has been previously mentioned the horses towards the latter part of last winter were a source of great anxiety. Luckily the mild winter was in their favour and we lost eleven, a small number to what we should have lost had the winter been severe.

The party under Sergeant Wilson arrived with thirteen ponies in February, one of which died at Lesser Slave Lake and two between the Peace River Crossing and St. John. Besides this Inspector Camies reports that three horses were abandoned before Graham was reached (these have not been seen since). The hay having been badly damaged by rain at Graham, Inspector Camies very wisely elected to send a number of horses out at the end of the trail cutting season, sending Corporal McLeod with five constables and twenty-three horses to be wintered possibly at Peace River Crossing, or Lesser Slave Lake. This party reached Lesser Slave Lake with seventeen of these horses two being left at the crossing. Corporal McLeod reports having lost two horses near Cache creek where there are a band of Indian horses, and two others on the trail from St. John to Peace River Crossing, one left behind at Hay Lakes and the other with P. Brick, who lives near, both of these horses will be recovered. A little later Inspector Camies sent out Constable Mansfield, H.G., with two other constables and fifteen horses. This party lost two horses register No. 139 dying near to Cache creek, and No. 146 was left with A. McAllister at Burnt River near Peace River Crossing. The two parties thus only losing one horse by death in the trip of nearly 500 miles from Graham to Peace River Crossing and in to Lesser Slave Lake. This I consider a very good record, considering the time of year and the scarcity of food for quite 100 miles in the mountains.

The party at Fort Graham now consists of one officer, three non-commissioned officers and eleven constables and one special constable (cook) with fifteen horses. Five constables were sent out with the party under Corporal McLeod. These men have completed two years with the trail party and elected to come out. I might here also mention that Corporal Bowler, T.H., was ordered out early in the season as was also Constable Clampitt, E., they being unsuited to the work. I have now forty-two horses at Lesser Slave Lake where they are turned out to graze on a large flat island about one mile from the post. Hay is plentiful here at about \$8 a ton, and I hope to winter all and have them in good shape for next summer's packing. I consider that there is sufficient hay for wintering the fifteen horses at Graham if economy is used. Inspector Camies has kept the strongest horses with his party.

PROVISIONS AND SUPPLIES.

As before mentioned the supplies to winter the party arrived on time at Fort Graham, the contractors (Messrs. Revillion Bros.) making two trips, one from Hud-

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sons Hope, the other from the mouth of the Findlay, taking up also the men's kits and other articles which could not well be packed.

These two shipments also moved the cache of police stores left by Revillions crew on the Hudson Hope portage, this, as before mentioned, to a very large extent was spoiled by the wet. The new contract shipment arrived in good condition but had suffered slightly from the hot sun, and there may be some loss among the ham and bacon, otherwise the shipment was in first rate order.

Unfortunately owing to the late arrival at St. John's of the Hudson Bay Company's steamer *Peace River* the men were obliged to go out on to the trail without a good issue of clothing being served out to them, the steamer arrived at St. John early in July with a large portion of our freight which for the most part had been waiting at Peace River Crossing since February, the clothing therefore was stranded at St. John's where it now is. Revillon's scow had gone through to Graham and so it could not go up that way. It is most unfortunate that this has happened, but it cannot be helped. From what I understand the Graham party are going to send down this early winter, this being the case I trust they will take the clothing with them. This is the only hitch as far as the stores are concerned. I would respectfully ask that boots be sent with as little delay as possible, none having been sent up since 1905.

CONDUCT AND DISCIPLINE.

I am very glad to be able to report that from all I can hear the party on the trail this season have behaved in an exemplary manner, and I am very satisfied with the work they have performed. Inspector Camies speaks very highly of his men, and I hope they will continue their work in the same cheerful manner. Corporals Profit and Lukey have been especially well spoken of, they are both excellent workers, and are well liked by the other men of the party. Special Constable Denny has also done very well bringing his pack train through a heavy season in good shape, this special constable has now gone out, and the pack train will be looked after by Constable Darling, J., who has been employed both season's so far with the pack trains.

BUILDINGS FOR THE WINTER.

From what I am able to gather two buildings are in course of erection at Graham, one for a barrack-room and the other for mess-room and kitchen, the former will be 30 x 34 and the latter 24 x 30, they will be built of logs which are close at hand. This winter the party will have to do without stoves but will have the ordinary open-fire places made with mud, and the cooking will be done with the large camp cook stove in use on the trail.

The shack at the Hay camp twenty miles off is already built, and I expect Inspector Camies will keep three men there changing them every now and then. I think the party will have no trouble in putting in a good winter.

TRAILS IN AND AROUND FORT GRAHAM.

There are three trails leading west and northwest from Fort Graham, British Columbia, as follows:

THE BEAR LAKE TRAIL.

From reliable sources, I understand that this trail is an exceedingly rough one, with very little feed and very hilly, there are several passes the summits of which are very high, there are many small creeks flowing into the Ominica and Osliaika rivers running through the country, the trail follows on a bench between the two, the distance to Bear lake is fully 100 miles, the feed is very scarce everywhere, the nature of the country being rocky, this trail is reported as being very indistinct and rough.

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THE INGINIKA TRAIL.

This trail is one which was used in 1898 and not since, it is reported to be fairly good and level and follows the Inginika river for about seventy miles, after this it becomes almost impassable, there is, however, good feed all along, parties who tried this trail in 1898 had to return.

THE SYLVESTERS TRAIL.

From what I am able to gather from a reliable source this is a good trail and follows the east bench of the Findlay river to the summit of the east branch when it follows a creek west till Sylvester's Landing is reached. This trail has not been used since 1898 (except by Indians) when it was used a great deal by the Klondikers, there is considerable large timber in some places and fires have swept over it and the deadfall is naturally very bad. There is lots of feed along this trail right into Sylvester's Landing and a great deal of it is through prairie land near the summit. The distance from Graham to Sylvester's is fully 350 miles. There are several Indians around Graham who know this trail and who might be hired as guides if necessary.

I am in favour of this route being taken next season instead of the one west of Fort Graham to Bears lake and Post 4 on the telegraph. Not only is the trail a better one, and more known, but there is better feed and the route to Teslin lake is more direct. I would point too that no one lives at Fort Conelly, the place having been abandoned, and what is more there is no one who seems to know anything of the country west of Graham. All known, that I have been able to learn that the trail along the telegraph (if it may be called a trail) is through most wild and rocky country with little or no food for horses.

GENERAL.

In concluding my report for 1906 I wish to say how disappointed I was personally at being held up in the manner I was. I am, however, hopeful that the coming summer will enable me to get through and personally see the situation. I have every trust and confidence in Inspector Camies to do what is best and most desirable in the public service, and the needs of the situation demand. I omitted when speaking of the personnel of the party that Assistant Surgeon L. A. Genest was sent to St. John to take the post vacated by Dr. W. D. L. Donald. Unfortunately like myself he was also held up and unable to get past St. John. The trail party are thus obliged to be without the services of a medical man. Dr. Genest has since been ordered out and left here late in October. The health of the party has been uniformly excellent except Constable Clay, S.G., who I ordered to headquarters as he suffered from sciatica; otherwise there has been but very slight ailments among the men.

Two accidents from cuts with axes have been reported, and it is on account of accidents more than anything else that the presence of a medical man on the spot is so important. I trust a doctor may be sent at no distant date.

From a report which I have from Corporal McLeod I understand that four parties of prospectors had arrived and intend wintering on the Findlay and Inginika rivers, in all thirteen men. They came to Inspector Camies at Graham and asked him if possible to take the Inginika route so as to give prospectors a chance of prospecting the head of that river where they expect to make valuable discoveries of minerals. I also understand that there is good mining (placer) in that vicinity.

GAME, FURS, ETC.

Moose and caribou, mountain sheep and goats seem fairly plentiful in the mountains, and timber wolves and coyotes are numerous; partridges and prairie chickens are often seen. Lynx and martin are the most common fur-bearing animals, and bears are common in summer.

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WEATHER CONDITIONS.

At Graham last winter about five feet of snow fell; the weather was not cold, chinook winds being frequent. It was an exceptionally mild winter: it was cold only for two or three weeks in January and February. The Findlay river at Graham did not freeze over till January 20, the lowest thermometer reading being 40 below zero. It is most unsafe to travel through the mountains after September, as the snow comes on very suddenly.

MAIL FACILITIES.

I fear it is next to impossible to reach Fort Graham with mail before the spring, when the party going in will be able to take what there is. Last year at Fort St. John it was nearly as bad and had it not been for the Macdonnell survey party but very little would have found its way out. If mail is to be sent in the best way would be to pay some Indians to go with a pack train from Stuart lake to Graham. The Hudson Bay Company's officer at Graham makes one trip annually from his post to Stuart lake in summer returning about October with his trading supplies. This is the only means otherwise.

LUMBER TRADE.

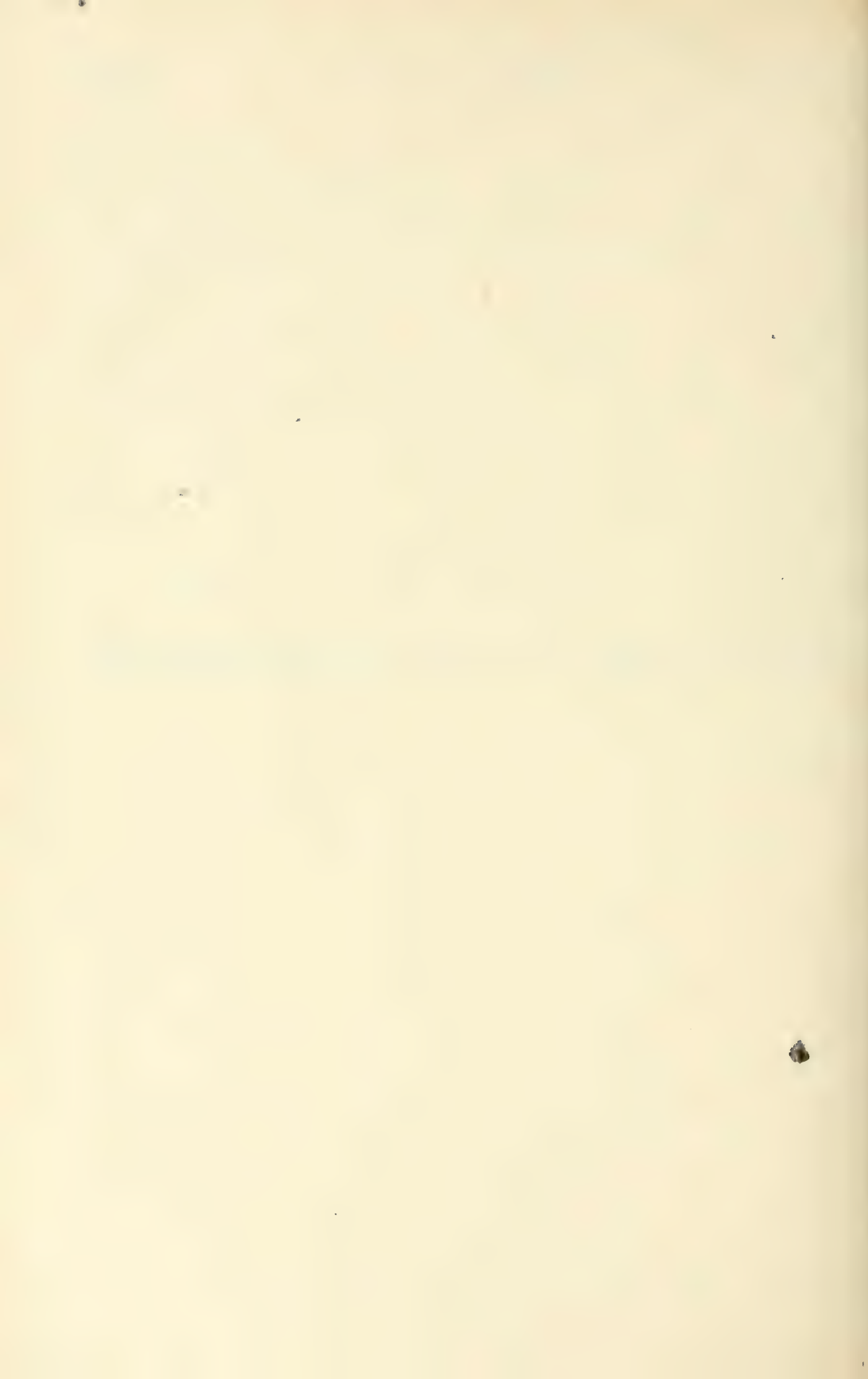
The country all through along the trail abounds in fair sized timber, and that around Graham is very fine. At some future date a great trade will probably spring up. It would be a great thing for settlers in Northern Alberta if some portable lumber mills could be introduced into the country by the government. The enormous price asked for lumber making it to the ordinary settler almost prohibitive. The wonderful advantages to be had from the waterway of the Peace river should be an inducement in itself. Most of the best lumber will, however, be found in the British Columbia territory.

I have the honour to be, sir,
Your obedient servant,

C. CONSTANTINE, Supt.
Commanding 'N' Division.

PART II

STRENGTH AND DISTRIBUTION OF THE ROYAL NORTHWEST MOUNTED POLICE



SCHEDULE A.

DISTRIBUTION STATE OF THE FORCE, BY DIVISIONS, DURING THE SUMMER OF 1906.

Division	Place.	Commissioner.	Asst. Commissioner.	Superintendents.	Inspectors.	Surgeons and Asst. Surgeons.	Veterinary Surgeons.	Staff Sergeants.	Sergeants.	Corporals.	Constables.	Supernumerary Constables.	Total.	Horses.
Depot...	Regina.....	1	1		4	1	1	8	3	2	40	9	70	44
	Wood Mountain.....							1		1	3	1	6	8
	Big Muddy.....								1		3	1	5	7
	Willow Bunch.....									1	1		2	2
	Moosomin.....				1					1	4		6	5
	Whitewood.....										1		1	1
	Arcola.....									1			1	2
	Esterhazy.....										1		1	4
	Yorkton.....							1					2	1
	Fort Qu'Appelle.....										1		1	3
	Kutawa.....										1		1	1
	Broadview.....									1			1	1
	Balecarres.....							1			1		2	3
	Moosejaw.....							1		1			2	2
	Ottawa.....				1			2					4	2
	Estevan.....							1					1	2
	Norway House.....								1			1	2	
	Weyburn.....										1		1	1
	Kamsack.....										1		1	1
	Shelo.....										1		1	1
	North Portal.....							1		1			2	1
	Oxbow.....										1		1	1
	Milestone.....										1		1	1
	Carnduff.....										1		1	1
	Craik.....									1			1	1
	Fort Pelly.....									1	2		3	3
	Grenfell.....										1		1	1
	Strassburg.....										1		1	1
	Canora.....										1		1	1
	Indian Head.....								1		1		2	1
	Carlyle.....										1		1	5
	Lake Winnipeg Patrol.....											4	5	
	Fort McPherson.....				1		1			1	7	1	11	
	Mortlach.....										1		1	1
	Frenchman's.....									1	2		3	2
	Elbow.....										1		1	1
	Town Station.....							1			1		2	1
	Lumsden.....										1		1	1
	On Command.....				2		2	3	2	18		1	28	24
	Total Depot Division.....	1	1		9	1	1	16	13	16	102	18	178	130
A.....	Maple Creek.....			1	1			2	1	1	6	2	14	16
	Medicine Hat.....				1				1		2		4	6
	Swift Current.....									1	1		2	5
	Town Station.....								1				1	1
	Medicine Lodge.....										2		2	5
	Ten Mile.....										2		2	3
	Willow Creek.....						2				1	1	4	5
	Cherry Patch.....									1		1	3	5
	East End.....										2		2	4
	On Command.....						1				1		2	4
	Total 'A' Division.....			1	2			5	3	4	18	4	37	52
C.....	Battleford.....			1	1			2	1		8	4	17	14
	Onion Lake.....							1					1	2
	Lloydminster.....								1		1		2	3
	Sounding Lake.....									1	1		2	2
	Jackfish.....										1		1	1
	North Battleford.....										1		1	1
	Tramping Lake.....										1		1	1
	Wardenville.....										1		1	1
	On Command.....						1		2		2		5	5
	Total 'C' Division.....			1	1			4	2	3	16	4	31	30

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Division.	Place.	Commissioner.	Asst. Commissioner.	Superintendents.	Inspectors.	Surgeons and Asst. Surgeons.	Veterinary Surgeons.	Staff Sergeants.	Sergeants.	Corporals.	Constables.	Supernumerary Constables.	Total.	Horses.
D.....	Macleod.....			1	2			4	1	3	25	8	44	36
	Pincher Creek.....								1		2	1	4	6
	Kootenai.....										1		1	3
	Frank.....									1	1		2	2
	Coleman.....										1		1	1
	Cardston.....									1	1	1	3	6
	Twin Lake.....							1			2	1	4	2
	Boundary Creek.....										1		1	1
	Big Bend.....										2		3	3
	Stand Off.....								1		2	3	6	5
	Kipp.....										1	1	2	2
	Peigan.....									1		1	2	1
	Porcupines.....										2		2	2
	Claresholm.....									1	1		2	2
	Nanton.....										1		1	1
	Leavings.....										1		1	1
	Lille.....										1		1	1
	Kootenai Pass.....										1		1	1
	On Command.....				1								1	2
Total 'D' Division.....				1	3			5	3	7	46	16	81	78
E.....	Calgary.....			1	1			3	1	2	13	4	25	18
	Red Deer.....										1		1	1
	Innisfail.....									1			1	1
	Olds.....										1		1	1
	Carbon.....									1	2		3	4
	Okotoks.....								1				1	2
	High River.....										1		1	1
	Laggan.....										1		1	1
	Banff.....								1		1		2	3
	Bankhead.....										1		1	1
	Canmore.....										1		1	1
	Morley.....									1			1	1
	Gleichen.....							1			1	2	4	3
	Berry Creek.....									1	2		3	4
	On Command.....							1					1	
Total 'E' Division.....				1	1			5	3	6	25	6	47	42
F.....	Prince Albert.....			1	1			2	1		4	2	11	14
	Puckahn.....										1		1	1
	Batoche.....										1		1	1
	Rosthern.....								1				1	1
	Duck Lake.....										1	1	2	3
	Saskatoon.....								1		1		2	3
	Humboldt.....										1		1	1
	Hanley.....										1		1	1
	Tisdale.....										1		1	1
	Goose Lake.....										1		1	1
	Gillies.....										1		1	1
On Command.....										1			1	
Total 'F' Division.....				1	1			2	3	1	13	3	24	28

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Division.	Place.	Commissioner.	Asst. Commissioner.	Superintendents.	Inspectors.	Surgeons and Asst. Surgeons.	Veterinary Surgeons.	Staff Sergeants.	Sergeants.	Corporals.	Constables.	Superintendents Constables.	Total.	Horses.
G.....	Fort Saskatchewan.....				1			3	1	3	12	2	22	13
	Edmonton.....				1					1	3	2	7	7
	St. Albert.....									1			1	1
	Lac St. Anne.....										1		1	1
	Wetaskiwin.....								1				1	1
	Camrose.....										1		1	1
	Daysland.....										1		1	1
	Sedgewick.....									1	1		2	3
	Ponoka.....										1		1	1
	Alix.....										1		1	1
	Stettler.....										1		1	1
	Athabasca Landing.....										1		1	1
	Andrew.....									1			1	1
	Saddle Lake.....										1		1	1
	Vegreville.....										1		1	1
	Vermilion.....										1		1	1
	On Command.....				1						1		2	
	Total 'G' Division.....				3			3	2	7	27	4	46	35
K.....	Lethbridge.....			1	1			2	2	1	12	3	22	22
	Coutts.....							1	1		2	1	5	10
	Writing-on-Stone.....									1			1	3
	Pendant d'Oreille.....							1	1		1	1	4	2
	Wild Horse.....										1		1	1
	Milk River.....										1		1	1
	Grassy Lake.....										1		1	1
	Taber.....										1		1	1
	Strike Camp.....									1	3		4	2
	On Command.....													
	Total 'K' Division.....			1	1			4	4	3	22	5	40	43
M.....	Hudson Bay.....			1	1			2	1	2	10		17	
N.....	Lesser Slave Lake.....								2		2	1	5	7
	Peace River Landing.....							1					1	2
	Fort Chipewyan.....								1		1	1	3	
	Fort St. Johns.....								1		1		2	
	Fort Graham.....									1	4		5	
	Peace-Yukon Trail.....			1					1	2	15	3	22	61
	On Command.....				2					1	1		4	
	Total 'N' Division.....			1	2			1	5	4	24	5	42	70

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Division.	Place.	Assistant Commissioner.	Superintendents.	Inspectors.	Surgeons and Asst. Surgeons.	Veterinary Surgeons.	Staff Sergeants.	Sergeants.	Corporals.	Constables.	Supernumerary Constables.	Total.	Horses.	Dogs.
B.....	Dawson.....	1	1	4	1		4	3	5	30	15	64	24	3
	Forty Mile.....							1		3		3		5
	Stewart River.....									3				19
	Selkirk.....				1			1		2	1	5	1	
	Stewart Crossing.....									2		2	1	6
	Grand Forks.....			1					1	1	1	4	1	
	Dominion.....							1		1	1	3	1	
	Hunker.....							1		1	1	3	1	
	Sulphur.....									3		3	1	
	Gold Run.....									2	1	3	1	
	Mayo.....								1			1		9
	Town Station.....						1		1	4	1	7		
	Total 'B' Division.....	1	1	5	2		5	7	8	51	21	101	31	42
H.....	White horse.....				1	2	3	3	2	22	9	42	14	
	Takhini.....									2		2	3	
	Tantalus.....									2		2	4	
	Livingstone Creek.....							1	1	2		4	2	
	Carcross.....			1						2	1	5		
	Conrad.....							1		1		2		
	Champagne's Landing.....								1	3		3	5	
	Kluahne.....								1	2		3	3	
	Dalton Trail.....									1		1		38
	Town Station.....								1	2		3		
	'Str. Vidette'.....									11		11		
	Teslin Lake.....								1	1		2		
	On herd.....												10	
	On Command.....		1	2			1	1		3	1	9	5	
	Total 'H' Division.....		1	4	2		4	6	8	42	23	90	49	38

RECAPITULATION.

Place.	Commissioner.	Asst. Commissioner.	Superintendents.	Inspectors.	Surgeons and Asst. Surgeons.	Veterinary Surgeons.	Staff Sergeants.	Sergeants.	Corporals.	Constables.	Supernumerary Constables.	Total.	Horses.	Dogs.
Regina District.....	1	1		9	1	1	16	13	16	102	18	178	130	
Maple Creek District.....			1	2			5	3	4	18	4	37	52	
Battleford District.....			1	1			4	2	3	16	4	31	30	
Macleod District.....			1	3			5	3	7	46	16	81	78	
Calgary District.....			1	1			5	3	6	25	6	47	42	
Prince Albert District.....			1	1			2	3	1	13	3	24	28	
Fort Saskatchewan District.....				3			3	2	7	27	4	46	35	
Lethbridge District.....			1	1			4	4	3	22	5	40	43	
Hudson Bay District.....				1			2	1	2	10		17		
Peace and Mackenzie Riv. Districts.....			1	2			1	5	4	24	5	42	70	
Dawson District.....		1		5	2		5	7	8	51	23	101	31	42
White horse District.....			1	4	2		4	6	8	42	21	90	49	38
Total strength, 31st July, 1906...	1	2	10	33	5	1	56	52	69	396	109	734	588	80

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SCHEDULE B.

DISTRIBUTION STATE OF THE FORCE, BY DIVISIONS, OCTOBER 31, 1906.

Divisions.	Commissioner.	Assistant Commissioner.	Superintendents.	Inspectors.	Surgeons and Asst. Surgeons.	Veterinary Surgeons.	Staff Sergeant.	Sergeant.	Corporals.	Constables.	Special Constables.	Total.	Horses.
'Depot' Division—													
Regina.....	1	1	9	1	1	9	6	4	61	12	105	62	
Areola.....								1	1	2	1	2	
Balcarres.....								1	3	1	5	6	
Big Muddy.....											1	1	
Broadview.....									1	1	1	1	
Canora.....										1	1	1	
Carlyle.....									1	1	1	1	
Carleton Place.....									1	1	1	1	
Craik.....									1	1	1	1	
Cupar.....										1	1	1	
Elbow.....										1	1	1	
Esterhazy.....										1	1	1	
Estevan.....							1				1	1	
Fort McPherson.....			1				1		1	3	1	7	
Fort Pelly.....									1	1	1	2	
Fort Qu'Appelle.....										1	1	1	
Grenfell.....										1	1	1	
Indian Head.....								1			2	3	
Kamsack.....										1	1	1	
Kutawa.....										1	1	1	
Lumsden.....										1	1	1	
Milestone.....										1	1	1	
Moosojaw.....									1	1	2	2	
Moosomin.....			1						1	4	6	5	
Mortlach.....										1	1	1	
North Portal.....							1		1		2	2	
Norway House.....								1		2	1	4	
Ottawa.....			1				2	1			4	1	
Oxbow.....										1	1	1	
Slebo.....										1	1	1	
Split Lake.....									1	2	3	1	
Strassburg.....										1	1	1	
Town Station (Regina).....								1		1	2	1	
Weyburn.....										1	1	1	
Whitewood.....										1	1	1	
Willow Bunch.....									1	1	2	3	
Wood Mountain.....			1				1		1	5	2	10	
Yorkton.....							1		1	1	3	4	
On command.....	1			1			1	1	2	4	10		
Total 'Depot' Division.....	1	1	1	14	1	1	16	14	19	108	17	193	130
'A' Division—													
Maple Creek.....				1			2	1		9	3	16	20
East End.....										2		2	4
Medicine Hat.....			1					1		2		4	6
Medicine Lodge.....									1	1	2	4	
Swift Current.....										1		5	
Ten Mile.....								1	1	1	2	4	
Town Station.....								1			1	1	1
Willow Creek.....							2			1	1	4	4
On command.....							1		1	2	1	2	
Total 'A' Division.....				2			5	3	4	19	4	37	50
'C' Division—													
Battleford.....			1				1	2	1	3	4	12	11
Battleford North.....										1		1	1
Jackfish.....										1		1	1
Lloydminster.....									1	1		2	3
Onion Lake.....							1					1	2
Radisson.....										1		1	1
Sixty Mile Bush.....										1		1	1
Sounding Lake.....									1	2		3	4
Tramping Lake.....										1		1	1
Wardenville.....										1		1	1
On leave.....			1									1	
On command.....				1			1		1	3	6	3	
Total 'C' Division.....			2	1			3	2	4	15	4	31	29

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Divisions.	Commissioner.	Assistant Commissioner	Superintendents.	Inspectors.	Surgeons and Asst. Surgeons. ¹	Veterinary Surgeons.	Staff Sergeants. ¹	Sergeants.	Corporals.	Constables.	Special Constables.	Total.	Horses.
'D' Division—													
Macleod.....			1	1			3	1	4	15	6	31	36
Big Bend.....										2		2	3
Blairmore.....				1								1	
Boundary Creek.....										1		1	1
Cardston.....				1					1	1	1	4	5
Clareholm.....									1			2	2
Coleman.....										1		1	1
Frank.....									1			1	2
Kipp.....										1	1	2	2
Kootenai.....										2		2	2
Kootenai Pass.....										1		1	1
Leavings.....										1		1	1
Lille.....										1		1	2
Nanton.....										1		1	2
Peigan.....											1	2	1
Pincher Creek.....								1		2		4	5
Porcupines.....									1			2	2
Stand Off.....								1		2	3	6	6
Twin Lakes.....							1			2		3	3
Total 'D' Division.....			1	3			4	3	8	37	13	69	75
'E' Division—													
Calgary.....			1	1			3	1	2	14	4	26	18
Banff.....									1	1		2	3
Bankhead.....										1		1	1
Berry Creek.....									1	1		2	4
Canmore.....										1		1	1
Carbon.....									1	2		3	5
Gleichen.....							1			1	1	3	4
High River.....										1		1	1
Innisfail.....										1		1	1
Laggan.....									1			1	1
Morley.....										1		1	2
Okotoks.....								1				1	1
Olds.....										1		1	2
Red Deer.....										1		1	1
On command.....								1				1	
Total 'E' Division.....			1	1			4	3	6	26	5	46	45
'F' Division—													
Prince Albert.....			1	1	1		2	1	1	6	3	16	20
Batoche.....										1		1	1
Cumberland House.....									1			1	
Duck Lake.....								1			1	3	3
Gillies.....										1		1	1
Goose Lake.....										1		1	1
Hanley.....										1		1	1
Humbolt.....										1		1	1
Melford.....										1		1	1
Puckahn.....										1		1	1
Rosthern.....								1				1	1
Saskatoon.....								1				1	3
Tisdale.....										1		1	1
Warman.....										1		1	1
On leave.....										1		1	
Total 'F' Division.....			1	1	1		2	4	2	17	4	32	36

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Divisions.	Commissioner,	Assistant Commissioner,	Superintendents,	Inspectors,	Surgeons and Asst. Surgeons,	Veterinary Surgeons,	Staff Sergeants,	Sergeants,	Corporals,	Constables,	Special Constables,	Total.	Horses
'G' Division—													
Fort Saskatchewan.....				2			3		3	12	2	22	21
Alix.....										1		1	1
Andrew.....									1			1	1
Athabasca Landing.....										1		1	1
Camrose.....										1		1	1
Daysland.....										1		1	1
Edmonton.....				1				1	3		2	5	5
Hurry.....										1		1	1
Lac St. Anne.....										1		1	1
Ponoka.....										1		1	1
Saddle Lake.....										1		1	1
Sedgewick.....									1			1	1
St. Albert.....								1				1	1
Stettler.....									1			1	1
Vegreville.....										2		2	2
Vermilion.....										1		1	1
Wetaskiwin.....								1				1	1
On command.....								1		1		2	1
Total 'G' Division.....				3			3	2	7	28	4	47	42
'K' Division—													
Lethbridge.....			1	1			2	2	1	7	1	15	15
Coutts.....							1	1		2	1	5	7
Grassy Lake.....										1		1	1
Little Bow.....										1		1	1
Milk River Ridge.....										2		2	4
Pendant d'Oreille.....							1	1		1	1	4	4
Stafford Village.....										1		1	1
Wild Horse.....										1		1	1
Writing-on-Stone.....										2		2	3
Total 'K' Division.....			1	1			4	4	1	18	3	32	37
'M' Division—													
Hudson's Bay Territory.....			1		1			2	1	10	1	16	
'N' Division—													
Lesser Slave Lake.....			1	1				3	1	12	2	20	48
Fort Chipewyan.....								1		1	1	3	
Peace River Landing.....												1	
Peace River Yukon Trail.....				1				1	2	11	1	16	19
Total 'N' Division.....			1	2			1	5	3	24	4	40	69

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Place.	Asst. Commis- sioner.	Superintendents.	Inspectors.	Surgeons and Asst. Surgeons.	Staff Sergeants.	Sergeants.	Corporals.	Constables.	Superintendents Constables.	Total.	Horses.	Ponies.	Mules.	Total.	Dogs.
'B' Division—															
Dawson.....	1	3	1	4	3	6	23	13	54	14				14	1
On leave.....	1								1						
Grand Forks.....							1	2	2					1	
Sulphur.....							1	2	2					1	
Dominion.....						1	1	1	2					1	
Hunker.....						1	1	1	2					1	
Grenville.....						1	1	1	2					1	
Forty Mile.....						1	1	2	3						5
Selkirk.....						1	1	1	2		1			1	
Stewart River.....								2	2						27
Town duty.....						1		4	5						
Total.....	1	1	3	1	4	8	8	39	13	78	20			20	33
H' Division—															
White Horse.....		1	2	2	4	4	3	16	8	40	22	1		23	17
Takhini.....								2		2	3			3	
Tantalus.....								3		3	3			3	
Carcross.....		1						3	1	5					
Conrad.....							1	1		1					
Champagne's Landing.....								3		3	3			3	
Kluahne.....							1	2		3	1			1	5
Livingstone Creek.....								2		2	1	1		2	
Town duty.....						1		3		4					
On herd.....											5	2	1	8	
Total, 'H' Division.....		1	3	2	4	4	6	34	9	63	38	4	1	43	22
Total, 'B' Division.....	1	1	3	1	4	8	8	39	13	78	20			20	33
Total strength.....	1	2	6	3	8	12	14	73	22	141	58	4	1	63	55

RECAPITULATION.

District.	Commissioner.	Asst. Commissioners.	Superintendents.	Inspectors.	Surgeons and Veterinary Surgeons.	Staff Sergeants.	Sergeants.	Corporals.	Constables.	Special Constables.	Total.	Horses.	Dogs.
Regina.....	1	1	1	14	1	1	16	14	19	108	17	193	130
Maple Creek.....				2			5	4	4	19	4	37	50
Battleford.....				1			3	4	15	15	4	31	29
Macleod.....				3			3	6	37	13	69	75	
Calgary.....				1			3	2	26	5	46	45	
Prince Albert.....				1	1		3	2	17	4	32	36	
Fort Saskatchewan.....				3			3	4	28	4	47	42	
Lethbridge.....				1			4	1	18	3	32	37	
Hudson's Bay.....				1	1		1	10	1	16	1	36	
Peace River-Mackenzie.....				2	1		1	3	24	4	40	69	
Dawson.....		1		1			3	3	39	13	78	20	33
White Horse.....			1	3	2		4	4	34	9	63	43	22
Total.....	1	2	11	34	6	1	50	54	69	375	81	684	576

SUMMARY.

Alberta.....			4	10			16	17	25	127	28	227	261
Saskatchewan.....	1	1	4	16		1	25	21	25	147	27	270	233
Northwest Territories.....			1	1	1		1	3	3	17	3	30	
Peace River-Yukon Trail (B.C.).....				1				1	2	11	1	16	19
Yukon Territory.....		1	2	6	3		8	12	14	73	22	141	63
Grand Total.....	1	2	11	34	6	1	50	54	69	375	81	684	576

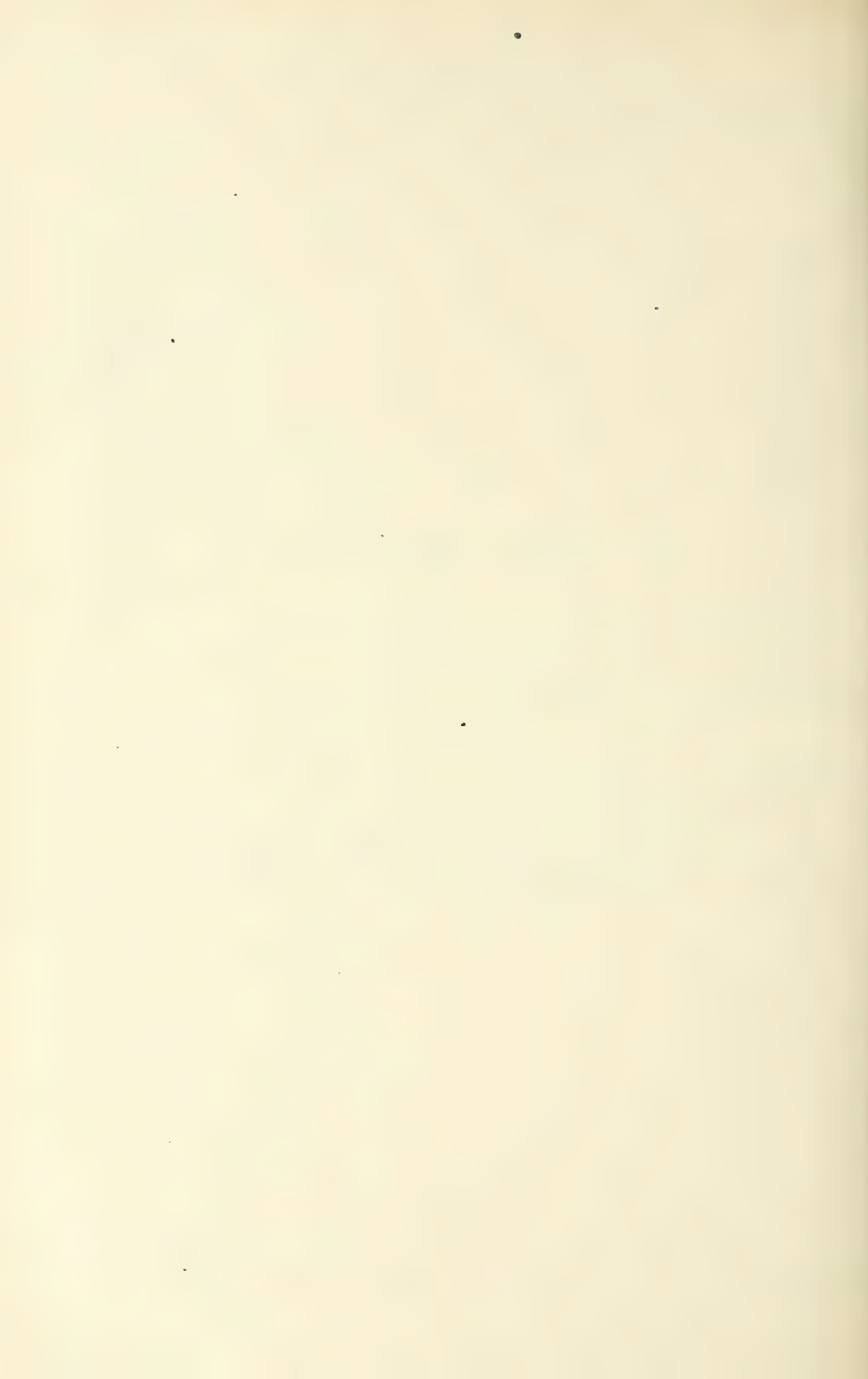
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YUKON TERRITORY

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ASSISTANT COMMISSIONER'S OFFICE,

DAWSON, Y.T., November 1, 1906.

The Comptroller,

R.N.W.M. Police,
Ottawa, Ont.

SIR,—I have the honour to submit my annual report for eleven months ended October 31, 1906, on the work performed by the Royal Northwest Mounted Police under my command in the Yukon Territory, together with the reports of the following officers:—Superintendent A. E. Snyder, commanding 'H' Division; Inspector T. A. Wroughton, commanding 'B' Division.

During the year the number of officers in the Yukon Territory was materially reduced. On December 1, 1905, the under-mentioned were serving in the Yukon:—

Assistant Commissioner Z. T. Wood.

'H' Division—

Supt. A. E. Snyder,
Inspector F. J. A. Demers,
" F. P. Horrigan,
" A. E. C. McDonell,
" P. W. Pennefather,
Surgeon L. A. Paré,
Assistant Surgeon S. M. Fraser.

'B' Division—

Supt. A. R. Cuthbert,
Inspector W. H. Routledge,
" T. A. Wroughton,
" J. Taylor,
" R. Y. Douglas,
" R. E. Tucker,
Asst. Sur. W. E. Thompson,
" G. Madore.

The under-mentioned were transferred to the new provinces:—Inspector P. W. Pennefather, Superintendent A. R. Cuthbert, Inspector W. H. Routledge, Inspector J. Taylor, Assistant Surgeon G. Madore.

And the officers serving in the Yukon on November 1, 1906, are:—

Assistant Commissioner Z. T. Wood.

'H' Division—

Supt. A. E. Snyder,
Inspector F. J. A. Demers,
" F. P. Horrigan,
" A. E. C. McDonell,
Surgeon L. A. Paré,
Assistant Surgeon S. M. Fraser.

'B' Division—

Inspector T. A. Wroughton,
" R. Y. Douglas,
" R. E. Tucker,
Asst. Sur. W. E. Thompson,

From the officers generally, I have had loyal and hearty support.

Superintendent Snyder, in command of the Whitehorse district, was senior officer in the territory during the six months I was on leave and performed the duties most acceptably to the government and the public. He has been of the greatest assistance to me in every way possible and has well upheld the good name of the force in the southern part of the Yukon.

It was with regret that I forwarded Superintendent Cuthbert's application for transfer. During the four years he had been in command of the Dawson district, his division was always efficient and law and order were well enforced. His loyalty, honesty of purpose and interest in his work could not be questioned.

Inspector Wroughton took over command of 'B' Division from Superintendent Cuthbert and is giving great satisfaction in the performance of his important duties.

Inspector Routledge, in charge of the creek detachments for many years and Inspector Taylor as acting paymaster, had performed their duties in a thorough and

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efficient manner. Inspector Pennefather of 'H' Division was most painstaking and thorough in his work and I was sorry to lose his services.

Assistant Surgeon Madore had been stationed at Selkirk with no other officer to associate with for nearly eight years. He was certainly entitled to transfer to a larger and more important post.

In addition to those alluded to above as having left the Yukon, Inspector A. E. C. McDonell and Assistant Surgeon S. M. Fraser are under orders for transfer to the new provinces. Both have been in this country for a long time and are fully deserving of a change.

GENERAL STATE OF THE TERRITORY.

It is gratifying to be able to report that the general state of the territory is in a most satisfactory condition, not only as far as law and order is concerned, but also from the standpoint of business, &c.

In my last annual report I drew attention to the change that was then taking place in the mode of mining, stating that the smaller operators and individual miners were fast giving way to companies with large capital, and that the latter would be enabled by means of dredges, hydraulic plants, &c., to operate not only on ground hitherto considered of too low grade to be profitable, but even on ground which had already been worked over by older methods.

The past year has witnessed the realization of this change and nearly the whole of Bonanza, Eldorado and Hunker, the three richest creeks, have been purchased by a firm of capitalists—the Guggenheim Brothers.

Pending the commencement of operations on a large scale by the new owners, the claims on the creeks mentioned have been lying idle; the result of this has been a great falling off in the output for this year, the production for the past eleven months not exceeding five and a quarter millions.

The acquisition of so many claims by one company has also resulted in a great change; where in past years the creeks named were scenes of bustling activity, nearly every claim being in operation, this season but little work is to be seen going on. This is of course but temporary as the present owners will have dredges and hydraulic plants in operation by next season and in fact have already built several of the former, in readiness for the opening of spring.

Such wholesale absorption of vast mining areas by different companies has been the means of seriously affecting the population, the exodus from the Dawson district being the greatest since the discovery of the Yukon, many of the well known creeks being practically abandoned.

Our strength has also been greatly reduced though we have endeavoured to exercise as effective a supervision as in former years. The withdrawal of some of our outposts met with much opposition on the part of the inhabitants of the districts concerned and, though I do not anticipate any increase of outbreak of crime in the places so abandoned, still I am of opinion we will find it necessary to re-establish at least some of the outposts so vacated. The old adage 'that prevention is better than cure' has never been more forcibly exemplified than in the Yukon and I sincerely trust that our inability to keep up an effective supervision in the outlying portions of the territory, will not result in an increase in crime.

The number of the criminal class in Dawson was somewhat increased during the fall by arrivals from the Tanana country in Alaska. These have already made their presence known by the execution of two or three very bold and daring robberies, committed in broad daylight, in the city of Dawson.

ASSISTANCE TO OTHER DEPARTMENTS.

The strength of the force having been so materially reduced we were necessarily compelled to curtail many of the extraneous duties formerly performed by us for other departments and indeed it will be difficult, if not impossible, for us to, in future,

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act in any capacity for other branches of the government service, except in connection with our regular and prescribed duties.

During the year we had the care of convicts, common jail prisoners and lunatics for the Department of Justice, none of the first mentioned having been sent out to the penitentiary at New Westminster. The magisterial work on the creeks was performed by our officers for this department, and all coronor's inquests and inquiries were held by them.

The Department of Indian Affairs claimed our assistance in looking after the Indians, furnishing them medical attendance, provisions and medicines, &c., when required.

For the Department of the Interior we acted as agents, on a number of creeks, of the mining recorders at Dawson and Whitehorse and also for the Crown timber and land agents. Our reduced numbers have compelled us to give up this work at Glacier Creek, and I fear that it will not be long before all of the work in connection with this department, now performed by us, will have to be taken over again by employees of the gold commissioner's office. The saving effected through having this work looked after on the creeks by the Royal Northwest Mounted Police has been very considerable as the following figures will demonstrate.

During the ten months ended September 30 last the amount collected by members of the force as agents of the mining recorders, in the way of fees, &c., amounted to \$36,357.85. The collection of this revenue cost the government \$3,635.78, that is 10 per cent of the amount received, this being paid to the members of the force doing the work. Under the former system the government would have to expend at least the sum of \$50,000 in the upkeep of these places, viz.: At Bonanza, Hunker, Stewart River, Dominion, Sulphur, Granville, Glacier (police withdrawn July 1), Selkirk, Forty Mile and Livingstone creek for salaries, rent, fuel, &c. In other words, the government collects an actual revenue of some \$32,722.07 under the present system as compared with an actual loss of at least \$13,642.15 under the former one, i.e., when the work was performed by employees of the gold commissioner's office.

During the year we also saw to the enforcement of the export tax on gold dust and used every endeavour to prevent the smuggling out of dust on which the tax had not been paid. This is one of the most unpleasant of our duties. Not much exception is taken to the examination of baggage leaving the territory, but the public generally resent the personal search conducted on train and steamer. Even customs officers on the frontier do not attempt a search of one's clothes and person such as our men have to make. It is humiliating and aggravating and passengers frequently lose their tempers and abuse the police, forgetting that the latter are only carrying out the law.

Much of the work performed by us in previous years for the Post Office Department has been discontinued, though we still render all the assistance in our power. One or two points are still furnished with mails and members of the force still act as postmasters at Selkirk and Stewart River.

Glanders, once so prevalent throughout the northern end of the territory, has been effectually stamped out, not a single case having been reported during the past year. The veterinary staff sergeants, as agents of the Department of Agriculture, have been most unremitting in their efforts to prevent an outbreak of this disease and have received the willing and active co-operation of the horsemen and stable men in the territory. The usual inspections of all animals entering the Yukon were made and the customary fees collected on foreign stock imported.

Seeds of various grasses, grains and shrubs were forwarded by the Department of Agriculture and were distributed for experimental cultivation, and while I have heard that the most satisfactory results have been obtained, written reports have not yet come to hand. Gardeners and others are glad to get the grain and seed in the spring, but when it comes to sending in a report at the end of the season some are very backward.

The enforcement of the provisions of the liquor license ordinance lies with the chief license inspector. Any infringement of the ordinance noticed by members of the force is brought to his attention.

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The dance halls, which are licensed by an ordinance of the Yukon Territory, are also under the control of the chief license inspector.

The only assistance rendered the Customs Department was at Dalton House, and, upon the withdrawal of that detachment, at Champagne's Landing, where the non-commissioned officer performed the duties of customs officer.

ARMS AND EQUIPMENT.

The force in the Yukon is now armed with our new Ross carbines and Colts revolvers. These were used at all practices on our ranges, and while some difference of opinion exists as to the qualities of the former, the latter was, on the whole, pronounced effective and serviceable.

The complete equipment, consisting of waist belt and bandolier, was also received and taken into use.

Our artillery consists of a brass muzzle loading 7 pounder (not effective) and a 7 pounder steel gun—the latter was received lately at Dawson from the outside. We have also the Maxim gun at Dawson and a Maxim and Maxim-Nordefeldt at White Horse.

CANTEENS.

Our canteens are in flourishing condition financially and furnish many necessities that would otherwise be beyond the reach of our purses. Prices are kept down to as low a figure above cost as possible and each institution has a very respectable surplus on hand and available for grants towards messes, recreation, library, sports, &c.

CLOTHING AND KIT.

All requisitions for clothing have been promptly filled with the exception of stockings and teamsters gauntlets. These will, however, be received in good time for our needs.

The quality of the articles supplied is very good with the exception of a considerable number of serges received at White Horse, which were badly soiled. Some of the serges and stable jackets were also found to be cut rather too short.

CONDUCT AND DISCIPLINE.

The conduct of the force under my command has been very good and worthy of commendation. Considering the conditions of life in this country and the hardships, &c., to which our men are so often subjected, it is gratifying to be able to record their excellent behaviour under many adverse circumstances. A few incorrigible offenders were dismissed—intoxicating liquor being the chief cause of their delinquencies.

CRIME.

Gambling made a sporadic appearance at several places during the year and while it is impossible to stamp it out altogether, every effort is made to prosecute offenders. At one time our efforts against this vice were nullified by peculiar local circumstances which compelled us to pursue rather forceful tactics to even prosecute the offenders. However, finally we were successful in obtaining several convictions but the infliction of fines, we find, is not deterrent. The only apparent remedy is a drastic one and that is that all keepers of gaming houses should be imprisoned without the option of a fine. This, however, magistrates are loth to do.

The aftermath of a case of sluice box robbery which occurred two years ago and for which the thief received two years' hard labour, took place this summer when, the culprit, on being released from prison, immediately proceeded to the place where he had concealed the stolen dust. He was carefully watched and arrested with the stolen property in his possession. On being brought to trial, his counsel entered a plea of

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autre fois convict and the jury acquitted him. Not a very satisfactory conclusion for our watchfulness but, as the owner of the gold recovered his property and the thief himself immediately after his trial left the country, some good was attained.

Some Dawson juries apparently have a strong objection to a verdict of 'guilty,' even in the face of the most incontrovertible evidence and even when the judge has charged in the most emphatic manner against the accused. In one instance, in a charge of theft from an employer, after the jury, in spite of the clearest evidence of guilt, acquitted the accused, the judge remarked from the bench that it was apparent, the only way in which an employer could protect himself from peculations by dishonest employees was by placing them under bonds. This leniency on the part of some local juries is stated to be due to a dread, that, should verdicts of 'guilty' be found, long sentences of imprisonment would follow.

Several bold and daring robberies occurred during the latter part of the summer, the thieves leaving no clue of any description that could be followed up. These all occurred during broad day light and on the principal streets of the city of Dawson. In one instance the safe in the sheriff's office was robbed of \$1,200 in gold dust, in another the sum of \$81 was taken from the safe in the police court: in both cases the safes were left unlocked during the temporary absence of the officials. A jeweller's shop was broken into while the proprietor was absent at dinner and some \$1,500 worth of jewellery taken from the window and show case, and in yet another instance a public bath-house was entered, the till broken open and its contents stolen. All of these crimes were committed by some one thoroughly conversant with the habits of the occupants of the different places and so judged their time that they were able to commit the robberies with impunity.

Whitehorse district has contributed but little to the record of crime in the Yukon during the past year. I am glad to be able to report that during the past eleven months there was only one case of drunkenness among the Indians, an offence which was very prevalent in other years.

Several sluice-box robberies occurred on Livingstone creek and although a number of men were arrested in connection therewith we were only able to get one conviction.

A little excitement was caused in September last by the escape near the boundary from the custody of the United States officials of two desperate criminals—Thornton and Hendrickson—who had been sentenced by the Alaskan courts to twenty-five years in the penitentiary. These men had broken jail on the Alaskan side on three different occasions, on one of which they had nearly murdered their jailer. They were also known to have committed other serious offences. On the occasion of their last escape, cold weather and hunger forced them to surrender to the authorities. During their trip through the Yukon Territory to the penitentiary at McNeil's Island the police guard-rooms were placed at the disposal of the United States marshal for the safe-keeping of his prisoners during temporary delays at Dawson and Whitehorse. For this assistance Deputy Marshal Wiseman was most grateful, as will be seen from the following interview given by him to the Seattle newspapers. 'He (Marshal Wiseman) declares the machinery in Alaska for caring for the transporting criminals of a dangerous type is altogether inadequate, and that in this matter the United States government will do well to take a leaf from the government of the Yukon, through which territory he passed on his way out with the prisoners. He was glad to accept from that government their assistance in the care of the men. Prisoners there are never known to escape. This he ascribes to the semi-military form of the Royal Northwest Mounted Police, the perfection of their discipline and the training given the members before being entrusted with responsibilities.'

It is interesting to note that both Hendrickson and Thornton, before they went to Alaska, were arrested and convicted of offences in the Yukon and were in our custody for sometime at Dawson before they were sent out to New Westminster to complete their sentences. While there they were pardoned and turned up here again, much to our surprise, before their terms of imprisonment had expired. Knowing the desperate character of these men they were told to move on and get out of the Territory as

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quickly as possible. It was then they went to Alaska and commenced their career of crime there.

BUILDINGS.

It was not found necessary to erect any buildings at either Dawson or Whitehorse posts during the year and, with the exception of detachment buildings at Champagne's Landing and Kluahne and repairs and small additions to our present quarters, but little has been chargeable to this account.

With our present strength it will not be necessary to provide for any additional quarters during the coming year unless it is decided to erect a building for the detachment at Conrad. Up to the present the men have been living in a tent, but of course will have to rent some house for the winter.

Some changes are contemplated in the buildings at Whitehorse. The one at present used as a guard-room is too small and too insecure for the detention of prisoners. A 'T' should be added to the barrack building. This would provide accommodation for a kitchen and a wash-room. The present kitchen is under the men's sleeping quarters—a very unhealthy arrangement.

We have been compelled at various times during the past few years to establish temporary detachments on the scene of some new discovery, more especially when a large number of stampeders have been attracted. Heretofore we have first housed our men under canvas during the summer, but had to build or rent log cabins for the winter months. If the new camp or creek gave promise of permanency good comfortable quarters, stables, storehouses, &c., were erected. It has several times happened, however, that our buildings have, after a year or more service, been abandoned owing to the shifting of the centre of population, due to ground in the vicinity being worked out or to the latter not being of sufficient value to work. It is impossible to foresee the various changes that occur in a country like this. Up to two years ago, for instance, Gold Run was one of the most important creeks in the Klondike region. Some four or five hundred men were employed, a post office was established, hotels and stores were erected and the police built a nice detachment with stable and storehouse. To-day I do not believe there are ten people on the creek. The miners, storekeepers, &c., have moved to Granville, some five miles away on Dominion creek, where there is now quite a settlement. As a result we had to abandon our Gold Run buildings and move with the people to the new centre where we are now renting a cabin at \$50 a month.

This and similar changes in other parts of the territory has entailed considerable, though unavoidable, expenditure which might in future be eliminated if a number of portable houses were purchased and stored at the headquarters of each division. These, when it became necessary to establish an outpost in some new district, could be easily and without great expense, transported to the scene of the new camp and erected with but little trouble. If later on the detachment was moved the buildings could be taken apart and re-erected where required. I would, therefore, recommend that a number of such portable buildings be procured and stored both at Dawson and Whitehorse where they would be available for future contingencies.

DETACHMENTS.

In my last annual report I recorded the closing of several detachments on account of reduction in strength, and for the same reason, viz.: further reductions, it was found necessary to abandon, at least temporarily, this year, the outposts at Mayo, Stewart Crossing, McQuesten, Minto, Grand Valley, Glacier, Wounded Moose and Gold Run in 'B' Division, and at Dalton House and Braeburn, in 'H' Division.

The only new outpost regularly established was that at Conrad, where a non-commissioned officer and a constable have been stationed. They boarded during the summer at an hotel, but lived in a tent. A permanent detachment will have to be established at this place.

Constables were posted at Tagish and Teslin Lake during the summer months, at the former place on account of the activity in mining development in that neighbour-

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hood, and at the latter on account of the smuggling of liquor by Indians from Atlin, British Columbia.

A constable was also stationed for a short time at Robinson's Siding (a station on the White Pass Railway, about twenty-five miles south of Whitehorse), a short distance from which some quartz discoveries were made, resulting in the usual rush of prospectors, &c.

I would call attention to my report of last year in connection with our detachments at Conrad and Carcross, and the advisability of the officer in charge being appointed a magistrate in and for the district of Atlin, B.C., and our non-commissioned officers and constables given authority as peace officers in British Columbia.

At both Dawson and Whitehorse the town stations were closed up in the interests of economy and the town details brought to barracks where quarters have been assigned them. This will effect a considerable saving and will not impair their usefulness.

The detachment at Kluahne will be withdrawn for the winter, as soon as the sleighing is good, and re-established in March. Very few miners remain in that district during the winter months.

The Livingstone Creek detachments would be withdrawn also, until spring, were it not for the fact that the non-commissioned officer in charge is acting as agent of the mining recorder and Crown timber and land agent. These duties compel us to keep open a post which would otherwise be closed until the residents of the creeks returned in March.

DOGS.

Not requiring as many dogs as formerly, several have been cast and destroyed, reducing their number by 35 and leaving an effective strength of 55. These should be sufficient for our requirements.

DRILL AND TRAINING.

While in the early spring the usual 'setting up' and arm drills were held at the headquarters of both divisions, owing to the decrease in strength and consequent greater demands made upon the time of those remaining, no other drills were possible during the year.

The members of 'H' Division were put through their annual target practice, but it was found impossible to get the men together in 'B' Division. The members of both divisions, however, received instruction in use of the new arms, shooting matches being held on several afternoons throughout the summer, in which every one, that could be spared, participated.

The usual lectures on police duties were delivered during the year in 'H' Division.

ESTABLISHMENT.

On December 1, 1904, the force in the Yukon numbered 300 of all ranks. I was directed to reduce the strength to 200 by ordinary wastage and, as a result, by the end of the year 1905 only 228 of all ranks remained. This spring it was decided to cut down the number to 150, so authority was granted to discharge by purchase all who wished to leave and to transfer some others to the new provinces. The loss of these, together with those who took their discharges on expiration of term of service, &c., had reduced our strength to 140 of all ranks. Of this number twenty-two are special constables so that our actual strength in officers, non-commissioned officers and constables is now 118.

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The wastage during the year was as follows:—

Loss—

Discharged—Time expired.....	13
Purchase.....	33
Invalided.....	1
Dismissed.....	10
Deserted.....	3
Died.....	1
Transferred to new provinces.....	11
	72

Gain—

Engaged.....	1
Transferred from Depot Division.....	1
	2
Total loss.....	70

The establishment of special constables also underwent the following changes:—

Discharged.....	63
Engaged.....	45
Loss.....	18

This represents a total decrease in our strength since December 1 last of 88 of all ranks.

FIRE PROTECTION.

While we have been fortunate enough to escape any serious loss or damage by fire during the past year we have not allowed prolonged immunity to cause any relaxation in our watchfulness and care.

At Dawson, in addition to our own fire fighting appliances, of which constant alertness forms a component part, we receive the further protection of the city fire brigade. The efficiency of the firemen has been greatly increased during the past year owing to the establishment, by the Dawson Water Company, of a very complete system of water works. Ten inch mains have been laid along the principal streets of the city, connecting with a very powerful pumping plant at the power-house and the company is compelled under contract with the government to maintain a steady constant and sufficient pressure at each fire hydrant; these are established at regular intervals throughout town. In addition to the hydrant in barracks, to which our own hose is attached, there are no less than four others in our vicinity which would be available for our protection in case of fire.

At Whitehorse the barracks are too far from the town fire hall in case of fire, but our own pumping plant and hose reel are always in readiness in case of an outbreak in our buildings. During the summer a small system of water works was installed at this post which connects several of the buildings with the pump-house; this not only adds to the comfort of the men, but ensures an instant supply of water in case of emergency.

On only one occasion did fire cause any damage during the year and that was in the artisans shop at Whitehorse. As far as could be ascertained, the fire originated in the blacksmith shop from a spark falling among some wood; but little damage, however, was done.

FORAGE.

Of the forage supplied in the Yukon during the past year the hay and oats required at Dawson were contracted for by an outside dealer, who also supplied the hay

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required at Whitehorse. The contract for oats at the latter place was awarded to a local merchant.

The oats in both instances were of very good quality, but the hay, which was of Canadian growth, was, I am sorry to say, poor. It seems strange that Canadian firms will not send a good quality of hay to this country. Good timothy is grown in Canada, but it is certainly not sent here. One would think that ordinary business foresight would induce Canadian produce men to endeavour to capture such a good market as this is and that none but the very best quality of feed would be shipped in. Such is not the case, however, and the result is that feed men and stable men here will not handle the Canadian article, but prefer to pay the higher price for that grown on the American side of the line. As far back as 1897 Canadian grown hay got a bad name in the Yukon and ever since the Americans have held the trade. The police, of course, stipulate in contracts for forage that it must be Canadian grown, but we are the only consumers of the home grown product.

HEALTH.

The health of the force has been exceptionally good, but several more or less serious accidents occurred.

Reg. No. 4226, Constable Gray, B.H., of 'B' Division, was badly frozen while on detachment at Forty Mile and suffered the loss of some fingers and toes. Otherwise he made good recovery and was returned to full duty.

Reg. No. 2836, Corporal Haddock, A.G., of 'B' Division, was accidentally drowned through the upsetting of a canoe while on his way from his detachment at Stewart river to arrest a lunatic at a wood camp some miles lower down. In some unaccountable manner the canoe overturned, precipitating him and his companion, Reg. No. 4043, Constable Allen, A.D., into the water. The latter managed to reach shore in an exhausted condition after heroic efforts to save his companion, but the former, sad to relate, perished.

Reg. No. 3859, Corporal Mousseau, J.A.M., of 'B' Division, was accidentally shot while taking part in a shooting match on the rifle range of the Yukon Rifle Association. The ball entered his back and penetrating one of his kidneys emerged in front just over the lower pocket of his jacket. He made splendid recovery and in a short time was returned to full duty.

Special Constable Scotty, an Indian, while on detachment at Champagne's Island contracted a severe cold which settled on his lungs and developed into pneumonia, resulting in his death in a very few days.

The strength of the force in the Yukon having been reduced to less than half what it was some two years ago, the maintenance of the police hospitals at Dawson and Whitehorse became no longer necessary. At the former place arrangements have been made with the city hospitals for the care of our sick, at least in so far as their housing and nursing are concerned, the patients still remaining under the care of our own physicians. Similar arrangements will be made at Whitehorse. The rates asked are most reasonable and I am of opinion that suitable agreements can also be entered into with local practitioners for the medical care of our men at far less cost than the upkeep of our present medical staff entails.

The general health of the territory has been exceptionally good and we have been practically free from any infectious or contagious diseases.

The vital statistics for the eleven months ended October 31, 1906 : Births, 99 ; marriages, 49 ; deaths, 79.

This is a decrease of 19 in the number of births, 4 in the number of marriages and an increase of 1 in the number of deaths as compared with the preceding year. This comparison, however, is made for the eleven months of this year and for the full twelve months of last.

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HORSES.

Owing to reduction in strength we were left with a great many more horses than were necessary for our requirements. I therefore directed that those not actually required be cast and sold. Others were unfit for service and some had to be destroyed. The total loss in strength is as follows:—

Cast and sold—Unfit for further service.	6
Cast and sold—To promote economy.	13
Destroyed—Old and unfit for service, or suffering from disease.	6
Died—Dropped dead on trail.	1
Killed by wolves.	1
Ponies—Cast and sold—To promote economy	4
Ponies—Killed by wolves	1
	—
Total loss.	32

'H' Division has still more animals than required, and these will be disposed of as occasion offers.

We have now available for service 58 horses, 4 ponies and 1 mule.

INDIANS.

A very small amount of relief was issued to Indians during the year, and their condition is better than it has been for some years, at least judging from the reduced number of applications for assistance.

Early in January last, at Dalton House, an Indian was so unfortunate as to accidentally shoot and kill his own son while out hunting, mistaking him, in the heavy timber and dense fog, for a moose. A full inquiry was held into the matter and the father completely exonerated from any blame.

Owing to the persistent reports of liquor being smuggled into the Teslin Lake district from Atlin in British Columbia, which I referred to in my last annual report, it was decided to establish a summer detachment in that vicinity, where, with the co-operation of the provincial authorities, steps might be taken to put a stop to the traffic. Our efforts were very successful and with the assistance rendered by the British Columbian officials the Indians were unable to obtain any liquor this summer.

An Indian boy was arrested at Tantalus for shooting with intent to kill. This was but another instance of a native retaliating on a white man for real or fancied unfair treatment. The boy was not altogether responsible for his actions, being an epileptic, and his excuse was that the man whom he tried to kill had cheated him in connection with a wood deal; he had nursed his grievance and took the first opportunity to 'get even.' He was committed for trial and brought to Dawson, where he was confined in the guard-room, but died before his case was called. His body was handed over to his relations at Moosehide, who buried him.

The Indians who have been living in the vicinity of McQuesten for a number of years left that district early last spring and moved their camp, bag and baggage, further up the Stewart river to Mayo. This was due to the disappearance of the game from that section of the country and also because of the closing of the trading post.

Reports from two prospectors were received in June last regarding the behaviour of the Indians on the Liard river. The reports indicated that these Indians were addicted to very peculiar practices, savoring of lawlessness, cruelty and even, in some instances, murder, in connection with the superstitious of their religion. It was also stated that one or two prospectors had disappeared in that region. Apparently our informant had received the information from trappers, who in turn had heard it from Indians. The latter view with dislike the appearance of white men in their hunting grounds, and evidently hoped by the spread of alarming reports and rumours to cause prospectors and trappers to keep away from what they (the Indians) consider their own preserves.

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INSPECTIONS.

During the year I was enabled to make several inspections of both districts, and the posts at Dawson and Whitehorse were inspected by the Comptroller when here in September last.

Our pay offices and Q.M. books were inspected by Mr. Reid, of the Auditor General's office.

MAILS AND TELEGRAPHS.

Notwithstanding the arrangements made for the weekly police patrol between Whitehorse and Dawson to carry second-class mail last winter, some misunderstanding took place on the outside and only the usual first-class matter reached Whitehorse. This was forwarded by the contractors, so with the exception of the first trip, the patrol had no mail to carry. The non-arrival of second-class matter during the winter was a great disappointment to the 'shut-ins,' many of whom had subscribed for magazines, &c., and looked forward to receiving them. On the opening of navigation in the spring, tons of magazines, papers and parcels, which had been eagerly looked for and desired all winter, arrived at the post office by the first two or three boats from Whitehorse.

Though we have had to stop all regular patrols the mails are still carried to outlying districts at irregular intervals or whenever these are visited by our patrols.

PATROLS.

On December 20, 1905, the annual patrol left Dawson for Fort Macpherson and returned on April 14, 1906. On the return trip very remarkable time was made, two of the party covering the 580 miles in twenty-five days; the same number of days were occupied in making the 475 miles which was the estimated distance by the route followed last year. The latter route, however, was over a very rough and hilly country and it was in order to avoid the great difficulties experienced on this trail that the new route was taken. The patrol on leaving Dawson travelled by way of our detachment at Mayo on the Stewart river, from thence up the Beaver to the Wind and Peel rivers and down the latter stream to Fort Macpherson. Nothing of interest occurred during the trip. The patrol reported the Indians on the Peel as extremely well behaved, being accustomed to halt while on the trail on Sundays and to hold religious services on that day; these are conducted by one of their number who is, as a rule, a regularly ordained deacon. The patrol was instrumental in forming a means of communication between several whaling ships, which were frozen in unexpectedly in the Arctic, and also brought in mail from the whaling crews and from Captain Amundsen, master of the ss. *Gjøa*, who had the honour of being the first to successfully navigate the North West Passage. By means of this patrol we are also kept in touch with the district tributary to the Upper Stewart and visit the trappers and prospectors in that region.

A special patrol was made, as in former years, up the Pelly river by our steamer *Vidette*. All the settlers, miners, prospectors, trappers and hunters en route were visited and their mail, &c., which had been collected at Dawson, delivered. Their attention was also called to the provisions of the Prairie Fire and Poisons Ordinances so that they could not plead ignorance.

Instructions were received to send a patrol from Whitehorse over land along the government telegraph line to Hazelton, to report on the feasibility of using the right of way along the line as a portion of the all-Canadian route from Peace river to the Yukon, and with a view to determining the best location for a trail. Inspector McDonell's report on the trip is attached. According to this twenty-two men starting work, in three different parties at different places on the route chosen, in the month of July, could make a good trail from Atlin to Hazelton before winter set in. If the pack trail from the latter place to the Omineca mines is used there would only remain

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to be cut out the portion from the latter point to Fort St. John. The distance from the Omineca Mines to Atlin is 790 miles.

RATIONS AND SUPPLIES.

All our provisions, with the exception of butter, were contracted for locally and are of very good quality, while the prices charged are reasonable. Butter is supplied by the government creamery at Calgary and is giving every satisfaction.

Contracts for all other supplies such as hardware, wood and dog feed were also let locally.

All our requisitions on Ottawa for general stores, stationery, &c., were most satisfactorily filled.

STEAMER AND LAUNCHES.

The *Vidette* was launched early in the season and after a busy season plying between Whitehorse and Dawson and the various detachments on the river and side streams was again hauled out, on her ways at Whitehorse.

Tenders were called for her purchase this fall, but no satisfactory bid was received, though I think it very likely that we can dispose of her this winter by private sale at a good figure. Now that our numbers are so reduced and economy is of such vital importance she can be dispensed with. While we have had the boat in commission she has proved of great benefit and assistance and on the whole has been the means of saving the government a great deal of expense. Now, however, our detachments are so few in number that it would not pay to keep her longer in commission, and even if a sale is not effected I would recommend that she be allowed to remain on the ways next season.

The launch *Gladys* was launched early in June, having had new machinery installed. She was always a splendid boat as far as her hull was concerned, and now with her new engines and boilers is a most efficient adjunct to our service. She is quite large enough to ride out in safety any of the storms on the upper lakes and is most seaworthy. We kept her on a regular patrol between Carcross and Conrad during the whole summer, and trips were also made to Tagish and other points on the lakes.

GENERAL.

The construction of the Klondike railway, which was unfortunately delayed last year, owing to disputes with claim owners over whose properties the line was surveyed, was resumed early in the spring, and work was prosecuted with great vigour all through the summer. The contractor, Mr. O'Brien, was enabled to live up to the terms of his contract, and the railway is now completed and in operation from Dawson to Sulphur Springs, a distance of 30 miles. The latter place is the head of Sulphur creek, and is on what is known as the 'Dome.' This point will be the terminus of the railway for the coming winter, and there the railway company have erected suitable buildings, such as waiting-rooms, freight sheds, &c., in fact all that is necessary for the transaction of a regular passenger and freight business from Dawson to the principal creeks, transfer being made to stages and freight wagons at the terminal point. This has, of course, resulted in the withdrawal of the stage lines between Dawson and these places. A preliminary survey has also been completed from Sulphur Springs through the valley of Flat Creek, almost to the Stewart river, and it is believed that construction will be commenced early next season, and the rails laid just as far as is possible before another year's freeze up.

On December 5, 1905, word was received in Dawson from Eagle, in Alaska, that Captain Amundsen, master of the ss. *Gjoa*, had arrived at that place from Herschel island, having travelled overland via the Porcupine river. He left Christiana, in Sweden, on June 17, 1903, in command of the *Gjoa*, and after two and a half years' struggle succeeded in successfully accomplishing the navigation of the northwest passage, and established his ship and crew in winter quarters at Herschel.

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Dawson and Whitehorse were visited during the summer by the Railway Commissioners, who took the evidence of those interested in connection with freight rates charged by the White Pass and Yukon route.

The Yukon Territory was visited in September by the Comptroller of the Royal Northwest Mounted Police. He was accompanied by Mr. Reid, of the Auditor General's Department.

On September 25, last, a most unfortunate accident occurred on the river, some nine miles below Little Salmon, or about twenty miles up river from our detachment at Tantalus, resulting in the total destruction of the steamer *Columbian*, and the deplorable loss of six lives, all members of the crew. One other, a man on his way to Dawson, in charge of a shipment of cattle, now in the White Horse hospital, although severely burnt, may recover; he will, however, lose at least one of his hands.

From what can now be ascertained it would seem as if the steamer *Columbian*, on her way to Dawson from White Horse, had a large consignment of powder on board, stored on the bow of the boat near the capstan. Fire, in some unaccountable manner, reached the powder, which exploded, and almost instantaneously the whole steamer became enveloped in flames. Two of the crew perished shortly after the explosion, being surrounded by the flames, and either falling or jumping into the river. The captain, who was at the wheel at the time, stuck manfully at his post and succeeded in beaching the boat, thereby enabling the remainder of the crew to reach the shore. Three of these were terribly burnt and succumbed to their injuries the following day, their death being doubtless hastened by the exposure they were subjected to the night following the accident, as they were compelled to remain without food or shelter until the arrival of the steamer *Victorian*, twenty-four hours later. The survivors were taken to White Horse, where the sixth fatality occurred—the purser—who only lived until October 11.

I have the honour to be, sir,

Your obedient servant,

Z. T. WOOD,
Assistant Commissioner.

DISTRIBUTION, OCTOBER 31, 1906.

'B' DIVISION.

Place.	Ast. Commissioner.	Superintendents.	Inspectors.	Surgeons and Asst. Surgeons.	Staff Sergeants.	Sergeants.	Corporals.	Constables.	Superintendents Constables.	Total.	Horses.	Ponies.	Mules.	Total.	Dogs.
Dawson, . . .	1	1	3	1	4	3	6	23	13	54	14	1		14	1
On leave, . . .		1						1	2	3				1	
Grand Forks, ...								1	2	3	1			1	
Sulphur, . . .						1		1	1	2	1			1	
Dominion, . . .						1	1	1	1	3	1			1	
Hunker, . . .						1	1	1	1	3	1			1	
Granville, . . .						1		1	1	3	1			1	
Forty Mile, . . .						1		1	1	3	1			1	5
Selkirk, . . .						1		1	1	3	1			1	
Stewart River, . . .						1		1	1	3	1			1	27
Town duty, . . .						1		1	1	3					
Total, . . .	1	1	3	1	4	8	8	39	13	78	20			20	33

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'H' DIVISION.

Whitehorse.....	1	2	2	4	4	3	16	8	40	22	1	23	17
Takhini.....							2		2	3		3	
Tantalus.....							3		3	3		3	
Carcross.....		1					3	1	5				
Conrad.....						1			1				
Champagne's Landing.....									3	3		3	
Kluahne.....						1	3		3	1		1	5
Livingstone Creek.....							2		2	1	1	2	
Town duty.....						1	3		4				
On herd.....										5	2	1	8
Total, 'H' Division.....	1	1	3	2	4	4	6	34	9	63	38	4	43
Total, 'B' Division.....	1	1	3	1	4	8	8	39	13	78	20	1	33
Total strength.....	1	2	6	3	8	12	14	73	22	141	58	4	63
												1	55

APPENDIX A.

ANNUAL REPORT OF SUPERINTENDENT A. E. SNYDER, WHITEHORSE.

WHITEHORSE, Y.T., October 31, 1906.

The Assistant Commissioner,
R. N. W. M. Police,
Dawson, Y.T.

SIR,—I have the honour to submit herewith my annual report for 'H' Division, Royal Northwest Mounted Police, for the eleven months ended October 31, 1906.

GENERAL STATE OF THE DISTRICT.

A report on the general state of the district is necessarily a report on the mining interests and capabilities, which are most promising. The large copper prospects in the vicinity of Whitehorse are at last attracting capitalists. One mine is being developed in a careful and systematic manner and so far has shown a very large body of ore, of a low grade. This ore would not pay to ship had it not certain qualities, which make it valuable as fluxing ore. A number of people have gone over the different mines, examining them, and options have been taken on a couple of the most promising.

In the Windy Arm district active development is being done on a number of claims, principally by the J. H. Conrad Consolidated Company. The principal claims held by this company are the Venus, Vault, Montana, Mountain Hero, Uranus and the Big Thing. There has been considerable tunnelling done in all these and they are all showing up well, particularly the Vault, Venus and Big Thing. Aerial tramways have been built to the Montana, a length of four and a quarter miles, to the Venus, 200 yards and to the Vault one and a half miles. The Big Thing is yielding richly in gold, the others are silver mines. Besides these there are about eight other properties on which development work has been done to a small extent. The assays show values from \$16 to \$100 and in some instances much higher, but the average values are about \$40 or \$50 to the ton. There will eventually be several very prosperous mines.

During the summer, in the neighbourhood of two hundred prospectors were working in the surrounding district on the Yukon side of the British Columbia boundary and several properties were staked on the Wheaton and the Watson rivers. J. H. Conrad took options on several and commenced development but very little work was done before the snow fell and stopped operations, it being impossible to get houses erected in time. These last mentioned properties are gold-bearing.

The Kluahne district has not produced much gold dust. Burwash creek, from which was expected a good yield, was rather disappointing to the miners working on same, the high water causing a set-back to their operations, the flood carrying away

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all their sluice boxes. Fourth of July Creek, however, will do better than last year. This is essentially a hydraulic country, cost of freighting making it impossible for the individual miner to make wages.

The Livingstone Creek district has been most prosperous, a large increase of output over last year, the total being in the neighbourhood of \$110,000.

Altogether the Upper Yukon from a mining point of view has never been so prosperous, or had a brighter outlook.

In the early part of October a census was taken of the southern or upper Yukon, from Yukon crossing to the British Columbia boundary. Only those who were considered permanent were included. The following are the figures obtained:—

	MALES.		FEMALES.		Total.
	16 and over.	Under 16.	16 and over.	Under 16.	
Whites	976	63	182	59	1,280
Indians.....	117	49	93	40	299
Total.....	1,093	112	275	99	1,579

The above figures are necessarily under the correct number, those temporarily absent from the district and those prospectors and miners in remote parts in every likelihood being left out. This census was taken by our detachments and tends to show that the permanent population of the district must have nearly doubled in the past year.

ARMS AND ACCOUTREMENTS.

Since last report we have received the new arms, rifles and revolvers. I am not prepared to make any remarks regarding the Ross rifle, as we have not been able to thoroughly test it. The revolver 'Colt' is a most serviceable weapon, far superior to our discarded 'Enfield,' but still I consider it a little on the heavy side.

The division was also equipped with new ammunition belts, both waist and bandoliers, since last report.

The two machine guns on charge, one with carriage equipment, are in serviceable condition.

ASSISTANCE TO OTHER DEPARTMENTS.

The assistance given to other departments during the year did not vary much from that given in previous years, and may be briefly summarized as follows:—

Customs.—Dalton House was a sub-port of entry until the middle of July, when, with the withdrawal of our detachment, Champagne's Landing was made the port of entry. The non-commissioned officer in charge of the Dalton House detachment acted as sub-collector until the close of that detachment, when such duties were performed by the non-commissioned officer in charge at Champagne's Landing.

Department of the Interior.—At Livingstone Creek the non-commissioned officer or constable in charge of the detachment at that place acted as agent for the mining recorder at Whitehorse. He also represented the Crown timber and lands agent at Dawson.

The member of the force in charge of the Tantalus detachment represents the Crown timber and lands agent at Dawson for the Tantalus district, collecting all coal royalties, timber fees, &c.

All persons leaving the territory, either by rail or walking, by this route, were searched by the members of the town detachment, Whitehorse, or by members of the

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Carcross detachment, for gold dust in their possession on which export tax had not been paid. Their persons, hand baggage and luggage were carefully searched. In this work they were assisted by a woman who searched the persons and hand baggage of all women passengers.

Department of Justice.—The guard-room here is the penitentiary, common jail and insane asylum of the southern half of Yukon Territory. Nine insane persons were escorted to New Westminster and handed over to the asylum authorities there during the year.

Three inquests and four inquiries into cause of death were held, our officers acting as coroners.

Telegraphs.—Assistance was given to the government telegraph service whenever called upon, both at headquarters and on detachments, to repair breaks on the line.

Indians.—All cases of destitution and sickness coming under, or brought to, our notice received assistance, and medical attendance. We have still on hand a small supply of clothing and blankets, received from the Indian Department, from which issues are made when the occasion warrants it.

Meteorological.—A complete record of the weather conditions in the district is kept, and complete returns made monthly to the head meteorological office, Toronto, gratis.

Liquor Licenses.—All infractions of the liquor license ordinance coming to our notice are promptly prosecuted, and the liquor traffic kept within the prescribed bounds.

Post Office Department.—A bi-monthly mail service was given by us to the Klukahne district, the mail being carried by our patrols. Our patrols also carried a monthly mail to Livingstone Creek and return during the winter months, for which we earned the gratitude of the miners living in that part, if nothing else.

In accordance with an agreement entered into with the Post Office Department whereby we were to carry 625 pounds of mail matter weekly from White Horse to Dawson, a weekly patrol was instituted between those points during the months of December, January, February and March. The mail service of the White Pass & Yukon route evidently thinking that this arrangement might endanger their contract, endeavoured to carry it all, with the result that we only carried some seven hundred pounds, the mail contractors carrying a very large quantity over and above their contract, a thing which they had never done before. This year they state they will not carry any mail in excess of the amount of their contract. Prepared and equipped as we were last winter to give this service, although we did not get the mail to carry, had its effect, and the people of the interior received all their mail with promptitude, which reached this point for them. This year, unless steps are taken towards the forwarding of all mail received here, I foresee considerable dissatisfaction, as anything above the quantity contracted for will be left here until the opening of navigation.

BUILDINGS.

Are in good repair. A small addition to the quarters occupied by the officer commanding was built. Logs were cut and got on the ground during last winter for detachment buildings at Champagnes Landing and Klukahne, both of which buildings are now in course of completion. A store-house was built at Carcross and several improvements made to the building the detachment live in, at that place.

CANTEEN.

The canteen, as in the past, proved most beneficial. Grants from canteen funds were made to the division mess, sergeants mess, skating rink, rifle club, and other praiseworthy purposes. Articles are sold at a minimum of profit consistent with sound management, thereby procuring necessities for the men which would otherwise be prohibitive.

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CLOTHING AND KIT.

Of good quality and sufficient to meet all requirements. In a consignment of serges received from Regina there were a considerable number unfit for issue, they being very badly soiled. The serges and stable jackets were too short for the greater number of the men of my command, it being difficult for a man five foot eight to get one long enough, whereas the average height of the division is near six foot.

CONDUCT AND DISCIPLINE.

The conduct of the division generally for the past eleven months has been fair. One sergeant and one corporal were reduced to the ranks for breaches of discipline. Two constables deserted while on escort duty to New Westminster, B.C., and one constable was dismissed for habitual drunkenness and serious misconduct.

CRIME.

There was very little crime of a serious nature in the district during the year.

At Livingstone Creek several labourers were suspected of stealing nuggets from bed-rock. Five arrests were made for stealing gold, one man named Johnson was convicted and sentenced to one year, one man is waiting trial and the charges against the other three were withdrawn by the Crown prosecutor, there not being sufficient evidence.

One case requiring comment is one of a man named Atkinson who gave out he was operating an underground railway. On the morning of October 12, a little before the train left here for Skagway, the town detachment found sixteen men concealed in a box car, they having got in there by removing the nuts on the car door without damaging the seals, which led to the suspicion that they had a confederate outside. After the stowaways were taken to the guard-room it turned out that they had paid a man named Atkinson \$10 a piece, he putting them in the car and intending to go by same train to Skagway and release them. The sixteen men received each a light fine, while Atkinson was sentenced to one year.

The following table gives a classified summary of the cases entered in 'H' Division during the eleven months ended October 31, 1906:—

Crime.	Entered.	Convicted.	Dismissed, withdrawn, not tried.	Remarks.
Offences against the person—				
Attempted rape.....	1	1	1	
Assault.....	6	5	1	
Pointing firearms.....	1	1	1	
Offences against property—				
Theft.....	17	4	12	1 awaiting trial.
Receiving stolen property.....	1	1	1	
Offences against religion and morals—				
Keeper of house of ill-fame.....	1	1	1	
Committing a nuisance.....	1	1	1	
Drunk and disorderly.....	17	17	1	
Creating a disturbance.....	1	1	1	
Vagrancy.....	16	16	1	
Fraud.....	2	2	1	
Circulating obscene literature.....	1	1	1	
Offences under Indian Act.....	1	1	1	
Offences under the ordinances—				
Selling liquor without license.....	2	1	1	
Selling liquor during prohibited hours.....	1	1	1	
Selling liquor wholesale on a retail license.....	1	1	1	
Drunk while interdicted.....	4	4	1	
Excessive use of liquor.....	1	1	1	Interdicted.
Infraction of fire ordinance.....	1	1	1	
Non payment of wages.....	2	2	1	
Insanity.....	2	1	1	1 recovered, one sent to N. Westminster.
Total.....	80	59	20	1 awaiting trial.
Arrested on capias, 4.				

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DEATHS FROM ACCIDENT, AND SUICIDES.

I regret to have to report a total of thirteen deaths under the above heading during the year in this district, twelve by accident and one suicide, which occurred as follows :

On December 11 one Bernard J. Kissam lost his life while hunting sheep in the neighbourhood of Canada creek, Lake Kluahne. The detachment at that place organized a search and followed his tracks as far as they went up the mountain. They led into a dangerous gully, in which there had recently been a snow slide, there the tracks stopped so it is presumed he must have started the snowslide and been carried down with it. His body was recovered in June and buried on the mountain side. He was a native of New York State and had only been about a year in the Territory.

On January 27, an Indian named Atlin Shorty and his twenty-year old son were hunting moose at the south end of Lake Dazerdeash. They were following the tracks of one and from the signs discovered that a moose was not far off. They accordingly separated, Atlin Shorty instructing his son to proceed slowly without noise in the direction of where the moose was supposed to have gone, he himself making a detour to the right. It was in making this short detour that Atlin Shorty in peering through the bushes saw what he took to be a moose, its head seemingly reaching up to browse from some of the higher branches and moving occasionally. Owing to the dense brush and severity of the storm then raging, the body could not be easily seen, but as he was absolutely certain that the moose was in front of him he took aim and fired. He heard a scream, rushed to the place and was horrified to find his son dead, shot in the right side. Inspector McDonell, who happened to be inspecting the Dalton House detachment at the time held an inquiry, when the foregoing was elicited.

One George Bauerman was on February 18 burned to death. A coroner's inquest was held on the following day, the verdict rendered being that he came to his death by suffocation and incineration, caused by accidental burning of his residence. Bauerman was living in a cabin partly wood and partly canvas, on the outskirts of the town, and on the day stated had evidently gone to sleep with a strong fire in his camp stove. When the blaze was first noticed it was only a very short time before the cabin was completely consumed, and only sufficient remains left of him to identify. The deceased had been an inhabitant of White Horse for the previous five years and was employed as a carpenter.

One Charles Baylor, a native of Ireland, committed suicide on the morning of March 31. For some time previous he had been suffering from very bad health, having visited the hot springs seeking relief, and evidently thinking he was incurable decided to destroy himself. He had made a disposition of his property and effects.

A man named Edward Jaegar was drowned while attempting to ford the Donjek river on May 19. He was in the company of a man named Sabin, they both being out on a sheep hunt. They were leading two horses and when they came to the Donjek river, Jaegar started leading the way across. He was swept off his feet by the swift current and carried down stream. The river at this point was fifty yards wide, four feet deep and very swift with ice on both banks. Although search was made no trace could be found of his body. He was a resident of Skagway where his mother resides.

On June 19, one W. L. Weaver was killed in the B. Y. N. shipyards here. He was working on a large dredge and some heavy timbers fell on him causing instant death. He was a native of New York State and a veteran of the civil war. He came to the Yukon via St. Michael's in 1879. An investigation was held and his effects taken in charge for the public administrator.

On July 9 an infant child of one Mrs. A. F. Dougherty was accidentally asphyxiated while in bed with its mother on that date. An investigation was held and the death found to be accidental.

On September 25 the steamer *Columbian* of the White Pass and Yukon route was completely destroyed by fire, nine miles below Little Salmon, at a point on the Yukon river called Eagle Rock, which resulted in the following loss of life :—

Joseph Walsh, 1st mate, missing (Burned or drowned).

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Edward Morgan, fireman, missing (burned or drowned).

John Woods, fireman, severely burnt, died on September 26.

J. Smith (Carl Christenson), deckhand, severely burnt, died on September 26.

Phillip Murray, mess waiter, severally burnt, died September 26.

L. C. Cowper, purser, severely burnt, died on October 11.

A man named Winstanley was also severely burnt, but is at present in the general hospital and hopes are entertained of his complete recovery. Surgeon Pare has been conducting an inquest, but at time of writing no verdict has been rendered, adjournment being necessary to take the evidence of Winstanley, who is still in hospital. From the depositions of the witnesses so far examined it would seem that the disaster was caused in a purely accidental manner and no blame attaches to any one.

DETACHMENTS.

Owing to decrease of strength, two detachments have been withdrawn, namely, Braeburn, on the White Horse-Dawson winter trail, and Dalton House, on the Yukon-British Columbia boundary. The Dalton House detachment was of no benefit as a police post, the Dalton trail being very little travelled and only by Indians.

The quartz strikes on the Wheaton and Watson rivers near the Yukon-British Columbia boundary necessitated the stationing of a man with saddle horse at Robinson siding from the latter end of July till the beginning of the present month, when, with the cessation of work, he was recalled to headquarters. Robinson siding is a point on the White Pass & Yukon railway twenty-three miles from White Horse, where prospectors, &c., leave the railway for the scene of the quartz discoveries.

DISTRIBUTION.

Place.	Superintendent.	Surgeon and Asst. Surgeon.	Inspectors.	Staff Sergeants.	Sergeants.	Corporals.	Constables.	Specials.	Total.	Horses, Ponies and Mules.	Dogs.
Carcross.....			1				3	1	5		
Conrad.....						1					
Livingstone Creek.....											
Tantalus.....											
Takhini.....											
Champagne's Landing.....											
Kluahne.....						1					
Town detachment (W. Horse).....						1	3		4	1	5
White Horse.....	1	2	2	4	4	3	16	7	39	18	17
Hazelton.....											
On herd.....										7	
On command.....										1	
Deserted.....							2			4	
Transferred.....					2						
	1	2	3	4	6	6	36	8	66	42	22

DOGS.

The number of dogs kept is being reduced each year. This year we have reduced the number by nearly half, but will have sufficient to meet all requirements.

DRILL AND TRAINING.

During the winter and early spring months daily drill was maintained in accordance with the new regulations respecting drill. Advantage was taken in the spring, when the horses came in from herd, to have a few mounted drills in the evenings when the horses were exercised. A squad was instructed in the machine guns, while lectures on police duties were delivered twice weekly during the winter months by Inspectors McDonnell and Pennefather.

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FERRIES.

The ferry at the crossing of the Tahkini river, on the White Horse-Dawson trail, owned by us, was again let to the road-house-keeper at that point, which saves us the necessary repairing each season. The scow originally placed in for this purpose is still in use, and as in the first instance, it was of very light construction, it has become so racked that it cannot last more than another season.

The ferry put in by us last season to cross the river here to the rifle range was used again this year. It is in good shape and proves a great convenience.

FIRE PROTECTION.

Efficient. Composed of steam pump and one thousand feet of hose, sufficient to reach any point in barracks. Fire pails and extinguishers are distributed throughout the different quarters.

FORAGE.

The oats are supplied by a local contractor and have been of very good quality. The hay supplied is of a very poor quality, having been badly cured and grown on dirty land. The waste in feeding is at least thirty-five per cent. Hay cannot be well cured on the western slope of the mountains, owing to the heavy rainfall. I would recommend that only east of the mountain hay be contracted for in future.

FUEL AND LIGHT.

Wood is the only fuel used in this district. That supplied last year was of excellent quality. We have not yet received our supply for this year.

The barracks are lighted throughout with electric lights, supplied by the Yukon Electric Company at very moderate prices.

GARDEN.

The garden did not give such good results this year as last. The season was very backward, the summer cool, with frequent frosts at nights, and we were only partially successful with the hardier varieties of vegetables.

A small quantity of different varieties of grass, oats, barley and wheat were received from the experimental farm and distributed, but were not given much of a test there being only one person in this southern end of the territory who goes in for agriculture to a small extent. At time of writing, as this man lives at Ten Mile Point, I have been unable to get any report from him.

GUARD-ROOM AND PENITENTIARY.

Our guard-room is a very sorry arrangement indeed, being neither safe nor comfortable, and costs more to heat and maintain than a properly constructed guard-room would. I have been expecting each year that authority would be given for the erection of a guard-room of proper construction. The time is at hand when we must have better accommodation in this respect. The population is increasing rapidly and we cannot hope that the same peaceful conditions we have had in the past will always maintain. At this time of writing every cell is occupied and prisoners are kept in the corridors.

The following is the acting provost's report for the eleven months ending October 31, 1906:—

The Officer Commanding

‘H’ Division, R. N. W. M. Police,
White Horse, Y.T.

SIR,—I have the honour to submit the following report on the guard-room for the eleven months ending October 31, 1906:—

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On December 1, 1905, there were 5 prisoners undergoing sentence; 81 were received during the year, 15 of whom received sentences ranging from 15 days to one year, 61 were released after a detention of from one to ten days on payment of fine, suspended sentence, case withdrawn or dismissed, 5 awaiting trial, of whom 4 were let out on bail.

Nine insane prisoners were received from 'B' Division, and were confined here from three days to a week, waiting the sailing of a Canadian steamer from Skagway.

Four prisoners were held on *capias* for periods ranging from three to six days.

There were 2 insane prisoners from this district, 1 of whom, after being held 14 days, was discharged cured, the other, after being 27 days under observation, was sent to New Westminster.

The greatest number of prisoners in one day was 19.

I have the honour to be, sir,

Your obedient servant,

W. McCLELLAN, Sergeant,
Acting Provost.

HARNESS AND SADDLERY.

In good repair and sufficient to meet our wants. If parts require renewing or repairing they are attended to by our own saddler who is a very efficient workman.

HEALTH.

The health of the division and district for the past eleven months has been very good. This subject will be fully dealt with in the surgeon's report.

HORSES.

Owing to the decrease in the strength of this division, it was found necessary to reduce the number of our horses. This I am doing as I can obtain purchasers, disposing of the older and least serviceable ones.

During the winter months all that are not actually required are turned out to herd near our detachment at Champagnes Landing, where they winter well, and are taken in after the snow leaves the ground, in good order. During the past eleven months 5 died, by accident or having received injuries were destroyed, and 5 horses and three ponies were sold, which with one exception brought good prices.

Seven horses taken by Inspector McDonell on his pack trip to Hazelton, were left there, arrangements having been made at that place to winter them at a very reasonable rate.

INDIANS.

The Indians in this district since last report gave us but very little trouble and were with one or two exceptions entirely self-supporting. Only one case of an Indian obtaining liquor came under our notice during the year; The Indian, an old offender, was given a short term of imprisonment.

A patrol was again despatched to the Teslin Lake district with the principal purpose of putting an end to the alleged trafficking in liquor with the Indians by traders from Atlin. The following extract from the report of Corpl. Henderson who was in charge of this patrol would show that this traffic has been curtailed considerably, if not completely stopped for a time: 'As soon as I was able to get my provisions, &c., cached on July 2, I started over the Atlin trail to "Gladys" lake to intercept if possible a reported shipment of liquor from Atlin. I learned later that immediately after our arrival one of the Indians started across the Atlin trail to warn any Indians who might be coming back with liquor. I patrolled as far as Gladys lake about ten miles on the other side of the British Columbia line in the hope of meeting Mr. Pilling who was employed at that point by the British Columbia authorities for the purpose of stopping

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the traffic of liquor with the Indians. Mr. Pilling, however, had been withdrawn and as I met no one I returned to Teslin on July 4. I am satisfied that the Indians brought no liquor into the Yukon while we remained and owing to the strict watch which the British Columbia authorities have been exercising lately the Indians find it now hard to obtain it. The chief of the Teslin Indians and two whites were arrested in Atlin a short time ago and, although the chief was not convicted the whites were fined which had a very good effect.'

A considerable number of cases of sickness were treated during the year by our surgeon.

INSPECTIONS.

Since last report the headquarters of the division were inspected by you four times and by the Comptroller once. You also inspected several detachments of the division.

The detachments were inspected as frequently as possible during the year.

The post was inspected weekly by the officer commanding, every building being entered, while the orderly officer made a daily inspection, the arms and accoutrements being inspected by him every Monday morning.

PATROLS.

A weekly patrol connecting with that of 'B' Division at Minto, left here every Monday morning during the months of December, January, February and March last winter. After the month of March this patrol was confined to this district, being monthly between White Horse and Yukon Crossing.

A bi-monthly patrol was carried out between White Horse and Kluahne. On account of our decrease in strength this patrol has been changed recently to once a month.

A patrol consisting of a corporal and a constable was despatched to the Teslin district; they patrolled that country with canoe until the end of September. This patrol was put out specially in the interests of the Indians living in that part, to prohibit their obtaining intoxicants and the trading in liquor alleged to be carried on by Atlin traders.

A patrol consisting of an officer, a sergeant and a constable with eight horses, four being used for packing was despatched in accordance with your instructions to prospect the trail between Atlin and Telegraph creek. Subsequently you issued orders to have this patrol continue on to Hazelton. It left here on July 15 and arrived at Hazelton on September 6. It being then too late to return by overland route, their horses were left at Hazelton, the patrol returning by steamer to Skagway, arriving here on September 27.

Several patrols were made between Pleasant Camp and Champagnes Landing during the summer months.

RECREATION.

With the decrease in strength I was able to fix up a barrack-room formerly used by specials and teamsters as a reading-room, where all the illustrated papers, magazines and newspapers are kept. In addition to this there is a library containing over one thousand volumes, purchased by the library fund, which is contributed to by all members of the division, all of which tends greatly to the convenience and comfort of the men.

In winter we have a covered skating and also a curling rink, which were erected by popular subscription assisted by grants from canteen funds.

SUPPLIES.

With the exception of the hay, which is supplied from Victoria, B.C., and the butter, which is received from the government creamery, Calgary, all our provisions, oats, fuel and general stores are supplied by local contractors. This arrangement gives general satisfaction, all articles supplied locally being of good quality. The butter received from Calgary was excellent.

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TRAILS.

Several new trails were opened up in the district since last report, and considerable improvements were made to the older ones. Great credit is due our local government in this respect, money being judiciously expended when there is any good result to be obtained.

TRAFFIC.

With the exception of one independent steamer, the *Prospector*, which made two or three trips in September and October, the traffic on the river between here and Dawson was monopolized by the White Pass & Yukon route. From a disinclination of the White Pass & Yukon route authorities, I am unable to embody here the statistics supplied other years as to the total volume of business done, but should judge that it does not compare favourably with that done last year. The receipts of the railway, however, I think, exceed that of other years, the development of Carcross and Conrad being substantial factors in this connection.

TRANSPORT.

The steamer *Vidette*, after receiving some repairs to her hull, was launched on May 19, and on June 2 proceeded with freight for detachments on the river and Dawson. She was again put on the ways on October 5, and the crew discharged, after a very successful season. This boat was a great convenience.

The launch *Gladys* received an entire renovation, new machinery installed, and was used on the upper lakes this season. She proved a great success as to seaworthiness, speed, &c., and proved very useful to us.

The land transport both summer and winter is in good repair, and we have all we require.

I have the honour to be, sir,

Your obedient servant.

A. E. SNYDER, Supt.,

Commanding 'H' Division.

APPENDIX B.

ANNUAL REPORT OF INSPECTOR T. A. WROUGHTON, DAWSON.

'B' DIVISION OFFICE,

DAWSON, Y.T., October 31, 1906.

The Assistant Commissioner,
Royal Northwest Mounted Police,
Yukon Territory, Dawson, Y.T.

SIR,—I have the honour to submit the following report of 'B' Division covering the period from December 1, 1905, to October 31, 1906.

Having taken over the command of this division on September 10 from Superintendent A. R. Cuthbert, who was transferred outside at his own request, I am not as thoroughly acquainted with the general work of the division as I would like for the benefit of this report.

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ARMS.

We have now on charge in this division one steel 7-pr. which we received recently from 'E' Division. The bronze 7-pr. hitherto in use for firing the noon-day gun is obsolete and very old and really unsafe to use. I might add that the firing of the noon-day gun has been discontinued.

The Winchester carbines have now been replaced by the Ross rifle, and the Enfield revolver by the Colts.

Regarding the new Ross rifles which have been in use since December last, they have been found defective in several ways.

In all our contests our marksmen preferred the Lee-Enfield to the new arm.

Revolver competitions have not been altogether satisfactory, the defect lying either with the ammunition or the new Colt revolver, the result being that in actual shooting we had a percentage of over nine (9) mis-fires, a very serious matter.

The new brown belt equipment has been received and put into use, and gives general satisfaction, both in appearance and utility.

ASSISTANCE TO OTHER DEPARTMENTS.

Following the precedent as laid down in former years, members of this division, notwithstanding their police duties, have assisted other departments in various ways.

These duties, while not ordinary police duties, may be classed under the following heads :—

Asylum.—During the past year the number of insane persons in our custody was about the same as for the previous year, and there was an increase of one in the number sent to New Westminster Insane Asylum. During the year the following insane patients were sent out in custody :—

	Male.	Female.	Total.
British.....	4	1	5
American.....	1	..	1
Swiss.....	1	..	1
Peruvian.....	1	..	1
Norwegian.....	1	..	1
Total transferred to New Westminster.....			9
Total discharged at Dawson as cured.....			7
Total number in our custody during year.....			16

Coroners.—The duties appertaining to coroners are performed by officers of the division. During the year (6) six inquests were held.

Customs.—At the outport of Forty-mile one of the members of the detachment at that point assists this department daily, in the capacity of landing-waiter. Assistance was also rendered in other parts of the district as required.

Department of Interior.—All passengers leaving Dawson for points in Alaska by down river boats are searched for contraband gold dust, as is also their baggage. Those leaving by small boats or scows are searched at Forty-mile.

The following detachments have continued to perform the duties of local mining recorders and Crown timber and land agents for the Department of Interior: Forty-mile, Stewart River, Grand Forks, Hunker, Sulphur, Granville, Dominion and Selkirk, one less than last year, viz.: Glacier, which we abandoned in August.

Department of Justice.—All of the sheriff's processes (outside of Dawson) are executed by members of the various detachments.

The penitentiary and gaol, in connection with the above department, are in our charge, as is also the asylum.

Below is given a list of prisoners received into custody during the past year:—

Whites, male.....	183
Whites, female.....	4
Indians, male.....	1

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Colored, male.	1
Japanese, male.	1
Insane, male.	15
Insane, female.	1
Total.	206

For disposition of prisoners see synopsis attached.

The health of the convicts and common jail prisoners has been very satisfactory.

Inquiry Department.—During the year 180 inquiries for missing relatives or friends were received, and on investigation we were able to supply information in 80 cases. Much correspondence is entailed in connection with this branch of our duties.

Indigents.—Destitute cases are given assistance through this department, if, on investigation, such assistance is found necessary.

During the past summer a party of some 20 East Indians arrived in Dawson on a scow. They had no money and were at a great disadvantage, as owing to their religion they could not eat food cooked by any one but themselves, nor could they handle any meat. A few of them obtained work for a few days, but their employers had to discharge them on account of their being a general nuisance. We were compelled to assist them with provisions, and eventually sent them to White Horse on the police steamer *Vidette*, they working their way.

Telegraph.—Members of detachments along the telegraph lines have assisted the linemen when required.

Indians.—The more destitute of the Indians have been supplied with a limited quantity of provisions, twine for making fish nets, fish nets, old canoes, &c. All reported cases of destitution have received assistance. Medical attendance and medicines have been supplied them by the assistant surgeon of the division.

Liquor License.—We have had very little to do with this department during the past year. A few reports were asked for concerning certain roadhouses, which were forwarded.

Post Office.—During the winter of 1905-6 this division maintained a weekly patrol from Minto to Dawson, connecting with the White Horse patrol at Minto, carrying second-class mail when required. I must say that with the exception of the first patrol very little mail was handed to us at White Horse. Considerable police mail was carried.

Fortnightly patrols, carrying mail, were maintained during the winter of 1905-6, between the undermentioned points, viz.:—

Dominion-McQuesten-Mayo.

Grand Forks-Eureka.

Forty-mile-Glacier.

Stewart Crossing-Stewart River.

Hunker-All Gold.

Stewart River-Henderson Creek, Coffee Creek, White River, &c.

During the past summer the post office at Forty-mile was taken out of the hands of the police and handed over to Mr. Percy Overton, a broker of that place.

During the coming winter, owing to our recent reductions in strength, the above mentioned mail patrols will not be maintained except at irregular intervals.

General.—More or less assistance has been rendered the local government, public administrator, Department of Agriculture and mining inspectors. During the year the estates of fifteen (15) deceased persons were handed over to the public administrator.

BUILDINGS, REPAIRS, ETC.

During the past year no new buildings were erected in this division, and only the most necessary repairs for the up-keep of buildings, &c., were made.

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CANTEEN.

The canteen in this division is in good financial standing and is well patronized by all ranks.

During the summer a constant supply of fresh fruits, &c., is kept, and generally speaking the canteen is a great benefit to all members of the division.

CLOTHING AND KIT.

The clothing and kit supplied by the department during the past year has been of good quality and suitable for our requirements.

CONDUCT AND DISCIPLINE.

The conduct and discipline of the division for the past year has been very satisfactory.

Four (4) non-commissioned officers were reduced during the year ; three (3) in seniority of existing rank and one (1) to the rank and pay of a constable.

Thirty-eight (38) more or less serious breaches of discipline occurred during the year.

One constable deserted during the year, and seven (7) constables were dismissed for cause.

CRIME.

I am glad to be able to report that there has been a marked decrease in the number of cases entered and dealt with both in the police court and magistrates' court, and also in the territorial court; this decrease is probably owing to the fact that the vicious and criminal element on arrival in Dawson from the coast cities and lower river, are invariably warned to 'move on,' a hint which is at once obeyed without question.

In December, 1905, John Mullen was convicted of theft from a dwelling and sentenced to one year's imprisonment with hard labour. This was the first case brought up from clues obtained through the 'Finger Print System.'

John Sulies, an ex-convict, was arrested November 24, 1905, while in the act of recovering his 'plant' of gold bearing gravel, containing about \$700 in gold dust, the proceeds of his sluice box robberies of two years before, for one of which he had served two years imprisonment. He had his trial during December before judge and jury. Sulies had been committed for retaining stolen property in his possession, as well as theft, but at the instance of the Crown prosecutor he was indicted for theft only, the date of this theft being the date of his recent arrest when caught in possession of the gravel.

Sulies pleaded not guilty, his defence being 'autrefois convict' and that the sacks of gravel he was removing from the cache when arrested recently were the contents of the sluice boxes robbed by him two years before on claim No. 20 below on Sulphur creek, and for which robbery he had served a two years' sentence. At that time he had been convicted by circumstantial evidence only, and the gravel was not found. The judge instructed the jury that if they were satisfied the gravel found in Sulies' possession on November 24 last was the gravel from claim No. 20 below on Sulphur stolen two years previous they should acquit the prisoner. They were so satisfied and the verdict was 'not guilty.'

There were some curious points in connection with this case. Sulies when arrested in the act of removing to his cabin, from a cache wherein it had lain for over two years, several sacks of stolen gold-bearing gravel worth \$700 was found to be guilty of no offence, therefore should not have been interfered with. Had he been in lawful possession of this stolen property for the past two years, while serving sentence for stealing it, or was he obtaining lawful or unlawful possession of it on the 24th November last when arrested? The gold has been turned over by the court to the owners of No. 20 below on Sulphur and Sulies left for Alaska; our efforts therefore were not altogether fruitless.

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In last year's report the case of Indian Johnny, a young lad of 14 years of age, was mentioned. This boy was committed for trial at Whitehorse on the 29th September, 1905, on a charge of unlawfully shooting with intent thereby, then and there, to murder. He arrived here on the 13th October, 1905, having been transferred from Whitehorse. He suffered a great deal from epileptic fits, and on the 9th February was taken quite ill and soon became unconscious. He was removed to our hospital and placed in a private ward, but died on the night of the 14th February. Cause of death 'brain disease.'

During March a man named Charles Hammer was arrested for an attempt to cause an explosion with the intention, then and there, to destroy life and property. The alleged motive appears to have been jealousy, and his alleged method of obtaining revenge on the man and woman concerned was to make a bomb out of a piece of gas pipe, gun powder and fuse, and to conceal this in a hollowed-out piece of firewood, the two halves of which he nailed together, depositing the stick where it would be used as firewood by the persons he wished to injure. Fortunately before this piece of wood was placed in the stove the fact that it had been split and nailed together again was noticed, and the matter reported to us, when the discovery as stated above was made. The investigation of this case resulted in our finding in Hammer's cabin some chips which were apparently gouged out of the piece of wood into which had been placed the piece of gas pipe. A quantity of powder identical with that in the bomb was swept up from the floor where he is alleged to have done the work, and the cloth from which he had torn a piece to make the fuse was also found, one part fitting into the other. Hammer was committed for trial, and on the 7th May the jury returned a verdict of 'not guilty,' much to the presiding judge's surprise.

In May a man named Daniel Kaiser was charged with forgery at the instance of the Gold Commissioner's office for an act in connection with mining matters, and the jury returned a verdict of 'not guilty,' though the evidence seemed conclusive.

It is discouraging to those intrusted with the enforcement of the criminal laws that so many offenders go unpunished; this, I think, is often due to the sympathetic nature of the jurymen, as members of juries have been heard to say that a verdict of 'guilty' would have been reached in certain cases but for the fear that too severe a sentence would be inflicted.

Two trappers named Eastman and G. Horsfal, from the Upper Pelly river, reported during May that in the summer of 1904 a man named Charles Simpson and a partner known as 'Fred,' went up the Pelly and McMillan rivers, remaining at the mouth of Kalsas creek, on the latter river, for some time. In October of the same year, when seen by one of the above named men at the same place, Simpson was alone, and when asked where 'Fred,' was, stated he had joined an old friend of his who had come from Peel river and had returned with him to that point. Simpson at that time was in possession of 'Fred's' outfit, consisting of grub, traps, boat, etc. Simpson spent the winter of 1904-5 on the McMillan, as did also Eastman and Horsfal, and the three returned to the Yukon on the first water of 1905, whence Simpson appears to have gone east. Eastman's and Horsfal's suspicions were only aroused this spring from the fact that they have, since 'Fred's' disappearance from the McMillan, seen many trappers from that part of the country, none of whom know anything of a man having come from McMillan to the Peel, nor from the Peel to the McMillan, nor of 'Fred,' and such a man having returned to the Peel in the summer or fall of 1904; notwithstanding the fact that it would have been difficult for this to occur without some trapper getting knowledge of the fact. After two years had elapsed, it was a hard matter to obtain any results from investigation, but we eventually ascertained that Simpson had died in the winter of 1905-6 in the Lower River country (Alaska). 'Fred's' body, if murdered, has not been recovered. We have not been able to find out 'Fred's' full name, as he was only known in that country as 'Fred.'

During May, in consequence of certain complaints, special steps were taken to ascertain what gambling existed in Dawson. Although the complaints were to the effect that 'open and crooked gambling existed' no evidence to verify this was obtained,

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and it was clear from the first that the complainant has objects of his own in endeavouring to mislead us. In the course of the investigation, however, it was found that in two cigar stores, poker, &c., for small stakes was being played, and a rake-off taken for the house; information was sworn out and the usual action taken.

On May 30 the theft of \$81 occurred from the safe at police court, in charge of H. G. Blankman, the police court clerk. It seems that he, in the usual course of his duties, received the sum of \$81 and pending its deposit in the bank placed it in the safe in the police court in his bank book. While having the safe open he had occasion to leave the office for a short time and neglected to close the door of the safe and lock it. Mr. Blankman returned to the office and locked the safe without checking its contents (of the safe). Next morning, when preparing his returns, he opened the safe to obtain the money therein for deposit in the bank and discovered that the money mentioned had been taken out. No evidence has been obtained of how, or when, the theft was committed, or by whom.

On June 29 a charge was laid against Detective W. H. Welsh by Joseph Andrew Clark, a barrister of this city, alleging that he corruptly accepted some \$4,000 on or about June 9, 1902, from certain gamblers in Dawson, supposed to have been in contributions of \$400 each from ten men, to allow gambling to run, and also, that on or about July 1, 1902, Welsh attempted to obtain a further sum of \$200 each from the said gamblers. Mr. Welsh was arrested on this complaint, but released the same day on bail, and the preliminary hearing was held on June 30 and July 6 before Mr. Justice Dugas, who put Welsh upon his trial. The trial was held on August 31 before Mr. Justice Craig without a jury, and was completed on September 5, upon which date the prisoner was declared not guilty by Mr. Justice Craig, who strongly commented upon the evidence offered by the Crown, saying that the informant, Joseph Andrew Clark, was moved only by animus and revenge, and that the evidence of Thomas Chisholm, the prosecuting witness, was unworthy of credence and that in his (the judge's) mind he was branded as a 'coward, a dastard and a liar.'

Two men named Charles Stephenson and Charles Johnston were caught in the act of stealing \$18.50 in gold dust from a sluice box on Bonanza in July, and at their preliminary hearing pleaded guilty and were each sentenced to two months' imprisonment with hard labour.

A colored man named Fred Hill was sentenced to six months' imprisonment with hard labour in August for the theft of \$124 from a cabin. ,

A case of some note was disposed off in August, by allowing the defendant to go on his own recognizance, when two juries failed to agree in the perjury case of T. W. P. Smith. The evidence in this case was very strong, and the judge at both trials charged against the prisoner, but neither jury was able to reach a verdict.

In September Daniel T. McGoldrick was found guilty of forgery in the Territorial Court and sentenced to three years' imprisonment with hard labour.

On September 29 a daring robbery was committed at the jewellery store of H. R. Peters, First avenue, Dawson, between 6 and 6.30 p.m., while the proprietor was absent from the store at supper. When he left his store he locked both front and back doors, and on his return found that the front door had been forced open and jewellery to the value of \$1,500 stolen. There were rings, &c., all over the floor as though the thief or thieves had been frightened. Their exit was through the back door and alley. A list and description of the jewellery was sent to Forty Mile and Whitehorse, but thus far no arrests have been made.

In January a man named Archie Boyd was charged by Frank T. Way, his employer, that while he had been working for him (Way) at Glacier as clerk in charge of a store he had mutilated and destroyed certain account books with intent to defraud, also that he had made false entries in the books with intent to defraud. These were the charges as presented to the jury, and the evidence disclosed was intended to prove that Boyd had sold merchandise and retained the proceeds, and that the destruction of the books and the false entries were made to conceal the defalcations. The judge's charge was adverse to the accused, but on February 8 the jury returned a verdict of not guilty.

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On September 11 the sheriff, Mr. R. J. Eilbeck, reported that a poke containing 86 ounces of gold dust had been stolen or taken as a joke from his safe in the sheriff's office between the hours of one p.m., of the 10th, and 10 a.m. of the 11th. On the 11th the sheriff's son and Corporal Withrow made a thorough search of the court-house, including the cellar, and also searched several other places for which a warrant had been procured. The banks were notified to keep a look out for 'Last Chance Dust,' this dust having some qualities peculiar to itself and can be identified by experts. The place from which the dust was taken being more or less open to the public, it is impossible to fix suspicion on any one in particular. A careful watch is still being kept and it is possible that some information may yet be forthcoming. A particularly careful search has been made at all points of exit to prevent the dust being smuggled out of the country. The door of the safe had been closed, but not locked.

LIST of Cases Entered and Dealt with in the District during the Year 1905-06—Police and Magistrates' Court.

Classification.	Cases Entered.	Awaiting from last year.	Convictions.	Dismissed.	Withdrawn.	Awaiting Trial.	Committed for Trial.
Against religion, morals, &c.—							
Drunk and disorderly.....	81		81				
Publishing obscene matter.....	1						1
Keeping a common gaming house.....	13		10	3			
Playing or looking on in common gaming house.....	71		65	6			
Riotous and disorderly conduct.....	1		1				
Committing an indecent act.....	1		1				
Vagrancy.....	4		2	2			
Administration of law and justice—							
Contempt of court.....	1		1				
Perjury.....	5						5
Against public order—							
Carrying a pistol, no justification.....	4		4				
Doing an act with intent to cause an explosion.....	1						1
Against the person—							
Using threatening language.....	4		1	2	1		
Assault.....	24		19	3	2		
Counselling and procuring assault.....	1			1			1
Assault, causing bodily harm.....	5		2	2			1
Attempted suicide.....	1						1
Wilful negligence.....	1						1
Against property—							
Theft.....	20		6	2			12
Cruelty to animals.....	2		2				
False accounting (fraud).....	1						1
Destroying book, property of employer (fraud).....	1						1
Forgery.....	3			1			2
Obtaining money under false pretences.....	2			1			1
Wilful damage.....	1		1				
Wilfully killing dog.....	1		1				
Against Fisheries Act—							
Fishing on Sunday.....	3		3				
Against Indian Act—							
Intoxication.....	4		3	1			
Giving liquor to Indians.....	3		3				
Having liquor in possession.....	1		1				
Against Extradition Act—							
Embezzlement by bailiff.....	1				1		
Against city by-laws—							
Violation fire by-law.....	2		2				
Violation health by-law.....	3		3				
Altering building without permit.....	1		1				
Against Yukon ordinances—							
Insane.....	13	3	9	7			
Intervention.....	6		6				
Drunk while interdicted.....	2		2				
Wages.....	5		2	1	2		
Killing game out of season.....	1		1				
Selling liquor during prohibited hours.....	4		4				
Employing unlicensed engineer to operate a steam boiler.....	1			1			
Operating a steam boiler without a license.....	1			1			
	301	3	237	34	6		27

Number of cases entered..... 301
 Percentage convictions..... 78.7

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LIST of Cases Entered and Disposed of in Territorial Court during the Year 1905-06.

Classification.	Cases Entered.	Awaiting from last year.	Convictions.	Dismissed.	Awaiting Trial.
Against religion, morals, &c.—					
Publishing obscene matter.....	1			1	
Administration of law and justice—					
Perjury.....	5			*5	
Against public order—					
Doing an act with intent to cause an explosion.....	1			1	
Against the person—					
Attempted suicide.....	1			1	
Shooting with intent.....	1	1		†1	
Wilful negligence.....	1		1		
Assault, causing bodily harm.....	1		1		
Against property—					
Theft.....	12	1	4	8	
False accounting (fraud).....	1			1	
Destroying book, property employer (fraud).....	1			1	
Forgery.....	2		1	1	
Obtaining money under false pretenses.....	1		1		
	27	2	8	18	

* Case perjury against T. W. P. Smith; two juries disagreed; defendant allowed to go on his own recognizance.

† Case of Indian Johnny, from White Horse; boy died in February.

DEATHS BY ACCIDENTS, SUICIDE, ETC.

During the year several deaths occurred under this head, of which the following is a list :—

In my last year's report mention was made of the supposed loss of a scow containing eight men. This scow left Dawson on October 22 when the river was full of ice. A man named Sinclair was in charge and the party was en route for the Tanana. It passed Forty Mile during the night of October 22-23 and is known to have reached a point below Coal creek, where it is supposed to have been caught in an ice jam and wrecked, and all on board drowned. Nothing has been seen or heard of this party since and no bodies have been recovered, so it is safe to say that the eight men were drowned.

On May 13 a man named Gus Ortman, a baker, disappeared, and his friends conclude that he committed suicide by jumping into the Yukon river. It appears that a man named Webb, who was the proprietor of the Vienna bakery, was anxious to sell out and Ortman bought the business, putting his own money, and also borrowed more, into the business. After the purchase some so-called friends commenced teasing Ortman about his purchase, telling him how the country was going backward and in fact completely discouraging the man, and it is surmised that he worried so much over putting his own and his friend's money into a concern that he was led to believe would not pay for itself that he committed suicide. Nothing definite has been learned except the above and no trace of the man has been found. Some years ago, while living in Chicago, Ortman is said to have disappeared mysteriously and then turned up in another part of the country.

I regret having to report the unfortunate accidental drowning of Reg. No. 2536 Corporal A. G. Haddock on June 15 under the following circumstances: Constable Allen had been detailed to go to Stewart river, of which detachment Corporal Haddock was in charge, with a warrant for the arrest of a man named Campbell on a charge of insanity. Campbell lived about half way between Ogilvie and Indian river, and my instructions to Corporal Haddock were to the effect that he was to use his own discretion as to the manner of making the arrest. I advised him that he had better communicate by wire with one of the down trip steamers and have it call at Stewart river and pick Constable Allen and himself up, remaining long enough at Campbell's cabin to make the

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arrest and bring the prisoner to Dawson by the same boat. On the 16th I received a telegram from Constable Allen that Corporal Haddock had been drowned a short distance above Ogilvie. On his return to Dawson, Constable Allen reported in effect as follows : Corporal Haddock had received information concerning Campbell and understood that he was violent and decided that the best plan would be to drop down the river at night in a canoe and make the arrest while Campbell was in bed ; consequently Corporal Haddock accompanied by Constable Allen left Stewart river about midnight on the 14th. Allen was instructed to sit in the bow of the canoe and Corporal Haddock did the paddling and steering. When at a point about five miles above Ogilvie, while trying to make a short cut, the canoe ran into a drift pile and capsized, throwing the two men into the river. Corporal Haddock could not swim and Constable Allen succeeded in getting him on the bottom of the canoe, but Haddock did not seem able to hold on and fell off three times, and each time he fell off Allen would help him on again. Allen saw that this was useless and told Haddock to catch hold of his slicker, which Allen was wearing at the time, and Haddock reached for it, but missed it and immediately sank. Allen at this time was some fifty yards from the shore and knowing the uselessness of waiting any longer in the swift current swam ashore and just managed to make it, but was unconscious for a time. Afterwards coming to himself he started for Stewart river over the hills and advised a man passing on a raft (the man had a horse on the raft and could not make shore) to tell the first steamer he saw to pick him up ; he was picked up a little later by the steamer *Whitehorse* and taken to Stewart river. Corporal Haddock's body has not been recovered.

On June 26 the body of a man was found on the dome back of Dawson. A party was sent up and brought the body down and an inquest was held, the jury returning a verdict of suicide. The jury could not determine the name of deceased, but it is safe to say that it was a man named Rudolph Kantusar, a young Austrian, not long in this country, and very little known. He was apparently insane.

On July 3 a man named Angus Monquin was accidentally killed by a cave-in of frozen earth on the hillside claim adjoining No. 33 below lower discovery, left limit, Dominion creek. An inquest was held, the jury returning a verdict of accidental death.

A man named John Hedstrom had been missing for some time and his friends in Dawson thought that he had been drowned. They reported that he had been acting strangely for some time, but it was not thought that he would commit any rash act. As the police steamer *Vidette* was going up the river I instructed Inspector Douglas to call at Hedstrom's cabin on Moose island, a short distance north of Ogilvie, and there they found Hedstrom lying on the floor of his cabin, the door of which was open, dead, with a rifle lying beside him and notes and letters addressed to different people, also a will leaving everything to Louis Cruickshank, of Ogilvie. The man stated in his letters that he intended to commit suicide, and no doubt did so while insane. An inquest was held, the jury returning a verdict of suicide.

On July 22 a man named James Grey died suddenly from heart disease on his claim on No. 18 Bear creek. An inquest was not considered necessary.

On September 7 it was reported by the Forty Mile detachment that a man named Dean Stanley had been drowned in the Forty Mile river by the upsetting of a canoe. Search was made for the body and it was recovered some days later and turned over to his brother. An inquest was not considered necessary.

On September 28 the following telegram was received by the agent of the steamer *Prospector* and handed to us : 'After taking up tickets to-day I find Mr. O. Rastad is missing from passenger list. We stopped at wood camp 35, D. Bowen, nine miles above Ogilvie, at 1.20 a.m. and away at 2.35 a.m. He was not seen after 11 p.m. o'clock last night, so kindly report to police. He was under the influence of liquor by reports from passengers.' Stewart river was notified and Constable McLean left in a canoe for Ogilvie, but was unable to find out anything there and no trace of the missing man has been found to date. Reports were obtained from members of the crew of the steamer

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Prospector relative to this matter, but neither the captain or purser knew anything personally about the man.

On September 8 a man named Martin Rock was drowned near the mouth of Bear creek. A cable was stretched across the Klondike river and Rock and his partner were coming down the river and did not see the cable until it was too late. Rock was drowned, but his partner managed to make shore. The body has not been recovered.

On October 11 a man named Alfred Wright committed suicide in the *Prospector* hotel, Dawson, by shooting himself in the head. An inquest was held, the jury returning a verdict of suicide while temporarily insane. This man was an ex-member of the force, having purchased his discharge last summer.

In all the above cases the effects, &c., were turned over to the public administrator.

On October 18 a man named Harra Desrosiers was found dead in his cabin on claim No. 241 Granville. Inspector Douglas left at once for that place and on the 22nd held an inquest, the jury returning a verdict of 'death from an overdose of poison administered by his own hand.' All effects were turned over to the public administrator.

DETACHMENTS.

Owing to the reduction in the strength of the division it has been found necessary to close the following detachments, viz.:—Mayo, McQuesten, Glacier, Minto and Stewart Crossing, and the following winter detachments will not be opened this season, viz.: Wounded Moose and Grand Valley.

At Mayo, McQuesten, Minto, Glacier and Stewart Crossing there are practically few settlers or miners, and although I understand some representations were made to have some of the above detachments reopened, it was considered inadvisable, at least for the present. In the spring it is possible a man may be stationed at Mayo and Glacier during the summer months, if the work on the creeks and in the settlement justify it.

Detachments are still maintained on the creeks in the vicinity of Dawson and at Selkirk, Stewart river and Forty Mile. The last named detachment is the port of entry for the Customs Department, and it is a very important point for the reason that by means of it we are enabled to keep a strict surveillance and check on all people leaving and entering the country by the lower river. It is also necessary for the detection of parties attempting to evade the payment of the export tax on gold dust by going down the river in small boats.

During the summer Gold Run detachment was transferred to Granville, as the greater part of the population of that district now live in the vicinity of Granville.

The men in charge of all detachments are agents of the mining recorders for their districts and have given, I believe, every satisfaction both to the miners and to the government representatives.

During September the town station was closed, the town patrol being stationed in, and run from, barracks entirely, and this system seems to work very satisfactorily.

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DISTRIBUTION.

	Ass. Commissioner.	Superintendent.	Inspectors.	Assistant Surgeon.	Staff-Sergeants.	Sergeants.	Corporals.	Constables.	Special Constables.	Total.	Horses.	Pages.
Dawson.....	1		3	1	4	3	6	23	13	54	14	1
Town Patrol.....						1		4		5		
Forty Mile.....						1		2		3		
Stewart River.....								3		3		27
Selkirk.....						1		1		2		
Grand Forks.....								2		2		
Dominion.....								1		1		
Hunker.....								1		1		
Sulphur.....								2		2		
Granville.....							1	1		2	1	
On Command.....		1								1		
Total.....	1	1	3	1	4	5	8	39	13	78	20	33

DOGS.

There are thirty-three (33) government dogs and four (4) attached dogs on charge, and all are in good condition and sufficient for our requirements.

DRILL AND TRAINING.

During the spring, members of the division were drilled with the new rifle, but owing to our being reduced in strength and the work on hand being somewhat heavy there was not as much drill possible as I would like to have had.

Considerable rifle practice was indulged in by members of the division, and several first class shots developed, but the regular annual target practice had to be dispensed with as it was impossible to get the men together for that purpose.

FIRES, FOREST, ETC.

I am glad to say that forest fires in this district have not been as numerous as in former years and the amount of damage done was not very considerable.

The fires in Dawson during the year amounted to 35, causing an estimated loss of \$28,500.

FIRE PROTECTION.

Our equipment at present is a forty (40) gallon chemical engine and about 800 feet of hose, fire extinguishers and fire buckets. Fire parades are held regularly. We have also a hydrant in barracks to which the hose is always attached.

FORAGE.

The oats and bran shipped in on contract this year are of good quality, but the hay, I regret to say, was not by any means first class. It was evidently cut from low lying, marshy land and was not properly cured.

FUEL AND LIGHT.

Our supply of wood this year is of very good quality.

Light is supplied to us in Dawson and Grand Forks by the Dawson Electric Light and Power Company and the service is quite satisfactory.

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HARNESS AND SADDLERY.

Our equipment of saddlery and harness is in serviceable condition and sufficient for our present requirements.

HEALTH.

I regret to record the death by drowning of Reg. No. 2836 Corporal A. G. Haddock on June 15 by the upsetting of a canoe. This case is reported fully under the head of 'Deaths by Accidents, Suicide, &c.'

On the night of January 24-25 Reg. No. 4226 Constable B. H. Gray had his hands and feet badly frozen at Forty Mile. The temperature at that time was sixty-six (66) degrees below zero, and it is a matter of wonderment that he was not frozen to death. He had left barracks without permission and had been in one of the hotels, and on starting home stumbled into a deep ditch and was unable to get out by himself. Dr. Thompson was sent to Forty Mile at once and brought Constable Gray to Dawson, where he was placed in hospital. Constable Gray suffered the amputation of two fingers and several toes.

In July Reg. No. 4197 Constable Farrow, P.W., was admitted to hospital as being mentally unfit for police service. He was in hospital several days, and while not actually insane his condition was such as to render him unfit for further police service and he was accordingly discharged from the force as mentally unfit. He left for the outside immediately after discharge.

On August 18, while a rifle match was being carried out on the range of the Yukon Rifle Association, across the Yukon river, the said range being under the administration and direction of the said association, Reg. No. 3859 Corporal Mousseau, J.A.M., was accidentally shot, the accident having occurred as follows: One of the members of the Yukon Rifle Association, together with others taking part in the match, was at the time lying down on the butts firing. After discharging his rifle and while the men beside him were firing he apparently placed a cartridge in the chamber of his rifle preparatory to firing again. Before his turn arrived it commenced to rain and they decided to suspend firing on that account. Corporal Mousseau was some fifty feet away from the butt, going in the direction of the tent. After they had ceased firing the rifle of the member above mentioned was accidentally discharged, he having forgotten placing the cartridge in the chamber and having snapped the bolt. He had already placed the cap of the foresight over the muzzle of the rifle. The bullet struck Corporal Mousseau in the back to the left of the spinal column, going outwards and leaving the body just over the left lower pocket of his jacket. A surgeon was immediately sent for, the first one found being Dr. Barrett, who went to the range. As soon as possible thereafter Dr. Robertson, acting police surgeon in the absence of Assistant Surgeon Thompson, was sent for. After a temporary dressing on the range Corporal Mousseau was brought to barracks and a further examination was made of the wound by Doctors Barrett and Robertson. No serious symptoms developed until that night at about 10 p.m., when it was discovered that the left kidney had been perforated. On the advice of Doctors Barrett and Robertson Corporal Mousseau was then sent to St. Mary's hospital to undergo an operation, it not being deemed advisable to have such an operation performed at the police hospital as professional nursing and care would be required. On the following morning the necessary operation was performed and the kidney was found to be badly lacerated and the ends of the two lower ribs fractured. The ends of both ribs were amputated and the kidney sewn up, and Corporal Mousseau made an excellent and rapid recovery.

Generally the health of the division has been excellent.

The police hospital has now been closed and arrangements made with the Good Samaritan and St. Mary's hospitals to receive police patients.

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HORSES.

Twenty (20) horses are at present on the strength of the division : all are in good condition.

Five (5) horses were cast and sold during the year as being unfit for further police service; one (1) horse was destroyed for dog feed, as it had become old and useless. Horse Reg. No. 2707 died from azoturia, and ten (10) horses were sold on account of their service being no longer required.

INSPECTIONS.

Dawson post and detachments were inspected frequently by yourself.

Inspections regarding sanitary conditions were made weekly by the Assistant Surgeon.

All departments of the division and all detachments were inspected frequently at irregular intervals by all the officers.

Dawson post was inspected in September by the Comptroller.

LIBRARY.

The division library has grown considerably since last year, there now being something like 2,000 volumes on hand. The library is maintained by a small monthly subscription from all members of the division.

LOSS AND GAIN.

The following is the loss and gain sustained by the division during the past year :

LOSS.						
	Inspectors.	Asst. Surgeons.	Staff Sergeants.	Sergeants.	Corporals.	Constables
Deserted.....						1
Mentally unfit.....						1
Dismissed.....						7
Discharged, time expired.....			1		3	7
Discharged, purchased.....				1	1	21
Drowned.....						1
Transferred.....	2	1	1		1	1
Totals.....	2	1	2	1	6	34
GAIN.						
Engaged.....						1
Transferred to "B".....			1	1		2
Totals.....			1	1		3

Total loss..... 46

Total gain..... 5

Total loss for year..... 41

Number of specials discharged..... 14

Grand total loss for year..... 55

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MILEAGE.

The mileage of the division is given below :

	Miles.
Travelled by men on foot.	4,309
“ with horses.	102,550
“ with dogs.	11,614
“ by canoe.	2,223
“ by steamer.	22,276
“ by stage.	4,886
“ by railroad.	960
Total mileage.	148,818

MINING.

The result of the output this year has been fairly satisfactory, though slightly less than last year. The water supply, upon which the miner must now largely rely for success in his work, has been fairly good during the summer, the rainfall being a little better than the average.

No new discoveries of any importance have been made, the only two worth mentioning being the Black Hills and Barker creek, the latter a tributary of the Stewart river, about twenty-two miles from its mouth. From thirty to forty men have been working there during the summer, but as far as can be ascertained they have not recovered more than wages from the ground.

It is now generally conceded that dredging is the most successful method of working the low grade gravels in the river and creek valleys. Two large dredges have been working in the Klondike River valley all summer and have been very successful.

A company called the 'Yukon Consolidated Goldfields Company,' also known as the 'Guggenheims,' have lately purchased a large portion of Bonanza creek, both in the creek and on the benches. They have about completed the building of three large dredges for working this creek, and in order to hydraulic the benches they are building a very large ditch from Twelve-mile creek, a tributary of the Yukon fifteen miles below Dawson. This ditch will carry from 5,000 to 10,000 inches of water. They have also partially constructed a dam at 57 above Discovery on Bonanza creek for the purpose of conserving water to be used in hydraulicking; this dam will be built about sixty (60) feet high. They have also built a power plant on Twelve-mile creek in order to generate electricity for the purpose of working their dredges.

They have recently purchased all of Hunker creek from Gold Bottom creek to its mouth, a stretch of about five miles, also Eldorado, and in fact nearly all creeks this side of the Dome have been absorbed by this company who will work them in the same manner as Bonanza creek.

This company has employed a very large number of men and has added very considerable activity to the camp during the summer.

The success obtained by mining with dredges combined with the very extensive purchases made by the Yukon Consolidated Goldfields Company have caused a large number of stampedes during the summer. Nearly all the old creeks that had been abandoned, as they could not be worked profitably by the old methods of mining, have been relocated by parties, who combine with a view to operating large stretches of ground by dredging. These stampedes have resulted in more claims being recorded this year than in any of the five previous years.

There has been renewed activity this summer in the Forty-mile district, a district in which mining operations were carried on for two years before the Klondike was discovered.

Quartz mining remains about as it was; considerable prospecting is going on but no discoveries of any importance have been made. Development work is going on on

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several properties but none have yet shown up to such an extent that they can actually be called mines.

At the beginning of the summer it was announced by certain miners they had discovered that the White channel gravel contained a certain percentage of gold independent of the placer gold. Several tests have been made by experts, but the results of the tests have, so far, been conflicting, and the matter is considered still in the experimental stage.

The indications are that considerable mining will be carried on during the coming winter by the old methods. This mining is, as a rule, carried on by what is locally known as the 'lay system,' that is, the owner gives a lease of his ground on the basis of receiving a small percentage of the gross clean-up at the end of the year.

As time goes on the old system of mining is gradually disappearing as the richer ground is worked out, and methods of working on a large scale must be resorted to in order that the low grade gravels can be worked at a profit.

PATROLS.

The district was frequently patrolled from end to end, by river in summer and by horses and dogs in winter.

A special patrol was made during the summer up the Pelly river to assist prospectors and miners in getting their outfits up. This patrol was not a success this year, owing to low water and the breaking down of the shaft of the *Vidette*.

A special report of Inspector Douglas on this patrol is appended.

The second patrol for Fort Macpherson left Dawson on December 20. It consisted of Staff-Sergt. Fitzgerald and Const. Walker of 'G' Division, returning north via Dawson, and Corpl. Mapley, Const. Forrest, Louis Cardinal and Sam Smith of 'B' Division, the two latter being guides.

The party had 5 dog teams of 5 dogs each. The patrol carried 25 pounds of mail, about 20 of which consisted of mail for the whalers frozen in near Herschell island. This patrol returned to Dawson in two parts, Corpl. Mapley and Louis Cardinal accompanied by Const. West, of Depot Division, who was returning from Macpherson to Regina, arrived first, during the early part of April, Const. Forrest and Sam Smith having remained at Macpherson until the return of the Macpherson patrol to Herschell island with mail for the outside. This patrol was performed without any untoward incident and very good time was made considering the conditions, Const. Forrest especially making a remarkably quick trip on his return, his daily average being 20 miles. Upwards of 300 letters were brought from the whalers who were ice-bound in the Arctic, and these letters were directed to all parts of the world and were posted here. It may be interesting to know that out of the hundreds of letters posted for the whalers only one was returned to us through the dead letter office, every letter having been stamped with the R. N. W. M. Police stamp, so that the receiver might know how it arrived from the Arctic.

As several letters were received from whalers by the United States consul at Dawson, the following letter might be quoted: 'Through the good offices of the R. N. W. M. Police, I received on Saturday last, 6 letters from American whalers wintering at Herschell island. Please accept my cordial thanks for this fresh courtesy. Whaling captains speak most appreciatively of their pleasant relations with the police officers at Herschell island, and of the protection afforded by their presence.'

I append hereto a copy of Corpl. Mapley's report on his patrol.

The weekly mail patrol between Whitehorse and Dawson, carrying second-class mail, was commenced on December 4 and ended on April 1, no special incident having occurred worthy of mention.

Special patrols were made from time to time, as required, to all parts of the district and between detachments.

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SUPPLIES.

Supplies sent in from the outside, as well as those purchased locally were, with few exceptions, of good quality.

TRANSPORT.

The transport in possession of this division is in serviceable condition and sufficient for our immediate requirements.

This has been an extraordinary season of navigation ; the season opened early and unusually high water prevailed until lately.

The proverbial 'oldest inhabitant' cannot recall such an exceedingly mild fall as that of 1906, for at this date steamers, both White Pass and independent lines, are still plying between Whitehorse and Dawson, and as yet practically no shore ice has passed Dawson; we have had only two or three light snow falls, and it has now nearly all passed away; the trails have been in excellent condition.

The larger steamers have been safely put on ways in their winter quarters after a very prosperous year. Hundreds upon hundreds of passengers and thousands of tons of freight were carried by these steamers, and I am glad to say that all freight reached its destination except that on the steamer *Columbian*. This ill-fated steamer, belonging to the White Pass Company was blown up and totally destroyed in September, when on its way to Dawson loaded with freight.

The whistle of the locomotive is a sure sign that confidence in the Yukon is not altogether a thing of the past as some would have us think, and there are those who are willing and able to invest their money in this great enterprise, *i.e.*, the Klondike Mines Railway.

This railway has been completed from Dawson to Sulphur Springs, a distance of 30 miles. Near this point is situated the Great Dome, being the highest peak in this celebrated gold area.

The English promoters contemplate making an extension next season of 45 miles and thereby enable them to reach the Stewart river near the mouth of the McQuesten river in two seasons more, making the whole of the vast Stewart river country tributary to Dawson.

Accompanying this report I beg to submit the estimates for the year 1907-8, also report of Inspector Douglas in charge of special patrol up the Pelly; report of Assistant Surgeon W. E. Thompson; report of Veterinary Staff-Sergeant Acres; report of Corporal Mapley, in charge of the Fort Macpherson patrol; report of Corporal Mousseau, provost at Dawson, and synopsis of prisoners confined during the year.

I have the honour to be, sir, your obedient servant,

T. A. WROUGHTON, Inspector,
Commanding 'B' Division, R.N.W.M. Police.

ROYAL NORTHWEST MOUNTED POLICE JAIL,
DAWSON, Y.T., October 31, 1906.

The Officer Commanding
'B' Division, R. N. W. M. Police,
Dawson, Y.T.

SIR,—I have the honour to submit the following report of the penitentiary and common jail, for the year ending October 31, 1906.

Two hundred and six prisoners were confined during the year ending October 31, 1906.

This shows a difference of 50 prisoners less than last year; but this difference is more apparent than real, when it is remembered that this year's report covers only eleven months, instead of twelve, as usual.

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The prisoners confined during the year are divided as follows:—

Whites, male.	183
Whites, female.	4
Indians, male.	1
Coloured, male.	1
Japanese, male.	1
Insane, male.	15
Insane, female.	1

Total.	206
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Number of convicts confined.	9
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Number of prisoners confined in common jail.	34
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Total number sentenced.	43
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Maximum number in any one day.	23
--	----

Minimum number in any one day.	11
--	----

Daily average for the year.	17
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The number of prisoners confined at midnight, October 31, 1906, was 13.
For further details see the attached synopsis.

Prison Conduct and Discipline.—The conduct of the convicts, and common jail prisoners, as shown by the books and registers, has been very good.

The offences committed on that score by the prisoners were few, and of no important nature.

A strict discipline has been maintained, both towards the prisoners and their escorts. The latter have performed their rather tedious duty in a most efficient manner.

Prisoners' Health.—The health of the prisoners has been very good during the year. The building where the prisoners are confined has been kept in as good a sanitary condition as possible.

Prison Food.—The food supplied to the prisoners has been of good quality and sufficient quantity.

Prison Clothing.—The prisoners are provided with two different uniforms, one for summer use, and the other for the winter. Both are well adapted to their purpose. These uniforms, and the materials necessary to repair them, were bought in the local market.

The rest of the wearing apparel worn by the prisoners, and of which they have ample supply, is issued by the Q.M. store.

Prison Employment.—During the past year the prisoners were employed as follows: Cutting, splitting and delivering wood, digging and repairing drains, making necessary repairs to buildings, painting, lime-washing, laundry work, mending and repairing their clothes, &c. It is, of course, impossible to state exactly the different kinds of work done by the prisoners. Besides what has been stated above, it may be said that the prisoners performed all the odd work that is required around such an extensive post as this one, which may be done by unskilled labour.

Lunatics.—The number of lunatics confined this year has been the same as last year, to wit: 16, 1 female and 15 males. Of these, 9, including the woman, were transferred to the lunatic asylum at New Westminster. The remainder were discharged as cured, after having been under observation for a certain time.

I have the honour to be, sir,

Your obedient servant,

J. A. MOUSSEAU, Corpl.

Provost.

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ROYAL NORTHWEST MOUNTED POLICE JAIL,
DAWSON, Y.T., October 31, 1906.

The Officer Commanding
'B' Division, R.N.W.M. Police,
Dawson, Y.T.

SIR,—I have the honour to forward the following synopsis of the penitentiary prisoners confined during the year ending October 31, 1906:—

Crime and Offence.	SENTENCE IN YEARS.			Totals.
	3½	3	2	
Theft from dwelling-house		2		2
Theft.....	1	2	3	6
Forgery.....		1		1
	1	5	3	9

The above synopsis includes one prisoner discharged at the expiration of his sentence.

There are only eight (8) convicts confined at the present time.

I have the honour to be, sir,
Your obedient servant,
J. A. MOUSSEAU, Corpl.
Provost.

ROYAL NORTHWEST MOUNTED POLICE JAIL.

STATEMENT of prisoners confined at midnight, October 31, 1906.
PENITENTIARY.

Name.	Term.	No.
Hrastel, Joseph.....	3 years, P.S.....	41
Frey, Frank.....	3 " ".....	37
Sarantis, George.....	3 " ".....	36
Monroe, Donald.....	3 " and 3 months.....	38
Shaw, D. R.....	3 " ".....	39
McGoldrick, D. T.....	3 " ".....	43
Cedar, Alex.....	2 " ".....	40
Boulay, Antoine.....	2 " ".....	42

COMMON JAIL.

Hanson, Nick.....	3 years and 5 months hard labour.....	3
Wollan, Ivor.....	3 " 2 " ".....	4
Mullen, J. A.....	1 year hard labour.....	2
Brindamour, M.....	18 months hard labour.....	15
Hill, Fred.....	6 " ".....	16

J. A. MOUSSEAU, Corpl.
Provost.

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Offence.	COMMON JAIL.																			Totals.
	PENITENTIARY.		Sentence in Years.		Sentence in Months.					Sentence in Days.			Paid Fine.	Discharged.	Suspended Sentence.	Released on Bail.	Transferred.	Committed for Trial.	Awaiting Trial.	
	Sentence in Years.		Sentence in Years.		Sentence in Months.					Sentence in Days.										
	34	3	2	3	3	1	18	6	3	2	1½	1									30	28	21	10	8	3
Prisoners confined November 30, 1905.	1	4	3	*1	†1			1			1	1								
Theft from a dwelling house.				2		1														
Theft.	1	2	2				1	1		2			1							
Theft of gold dust.																				
Forgery.		1																		
Judgment debtor.																				
Disorderly conduct.																				
Drunk and disorderly.																				
Cruelty to animals.																				
Fraud.																				
Theft from the person.																				
Attempt to commit suicide.																				
Drunk while intoxicated.																				
Intoxicated.																				
Extortion Act.																				
Carrying a pistol.																				
Threatening bodily harm.																				
Perjury.																				
Contempt of court.																				
Habitual drunkard.																				
Placing explosives with intent to do bodily harm.																				
Assault.																				
Capias.																				
Pointing revolver.																				
Insane.																				
Drunk (Indian Act).																				
Selling liquor to Indians.																				
Unlawful sale of liquor.																				
Vagrancy.																				
Having stolen property in his possession.																				
Gambling house, players in.																				
Totals.	2	9	5	3	1	1	1	2		2	1	7	1	2		2	2	3	190	

* Two sentences averaging 3 years and 5 months.

† Two sentences averaging 3 years and 2 months.

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APPENDIX C.

PATROL REPORT OF INSPECTOR A. E. C. McDONELL, WHITE HORSE TO
HAZELTON, B.C.

WHITE HORSE, Y.T., October 5, 1906.

The Officer Commanding,
R.N.W.M. Police,
'H' Div., White Horse, Y.T.

SIR,—I have the honour to furnish you with the following report of the duty performed by the southern patrol to Hazelton, B.C., in my charge, during the past summer, undertaken in compliance with the instructions contained in your memorandum to me, dated July 9, 1906.

The party, consisting of Regt. No. 1743, Sergt. Todd and Regt. No. 3464, Const. Monson, with 8 horses, left White Horse on July 18. I joined them at Carcross next day and loading horses and outfit on ss. *Gleaner* we left for Atlin, arriving at Taku next morning. Here the horses were taken across the 3-mile portage and the supplies were shipped by rail to Atlin lake where we loaded horses and outfit on ss. *Scotia* and crossed the lake arriving at Atlin at 10.30 a.m. of July 20. The afternoon was taken up in arranging packs and fitting saddles, and having engaged an Indian, 'Taku Jack,' a start was made from Atlin next morning July 21, at 8 a.m., for Telegraph creek, taking the wagon road to McKee creek, a distance of 12 miles. This is a fairly good road with a good bridge over Pine creek. The road ends at McKee creek. We then followed the telegraph right of way to O'Donnel river which we forded about half a mile up stream from the mouth and took a straight route to Pike river, arriving at 5.30 p.m., and camped near Telegraph station. Distance travelled, 25 miles. Good trail can be had by following Black Pine Ridge, from McKee creek to join Indian trail from Pike river and would shorten distance about 5 miles having Telegraph station to right of trail about 4 miles. Station is on shore of lake.

Sunday, July 22, 1906.—Stopped to look over trail, good feed and timber the whole way, timber easy to get through.

Monday, July 23, 1906.—Left camp at 5 a.m., taking Indian trail, had considerable chopping to get through, good feed, timber small, good trail can be had with little work. Camped for night on small creek 20 miles from Pike River telegraph station, passed 3 cabins, used by telegraph linemen for shelter. The wire crosses river seven times from the mouth to Summit lake, distance, 12 miles.

Tuesday, July 24, 1906.—Left camp at 5 a.m., passed 3 small lakes and had some soft going above timber line, country much more broken up and rough, but good trail can be had, camped at what Taku Jack calls 'Fish Lake,' not shown on map, distance travelled, 12 miles.

Wednesday, July 25, 1906.—Stopped over for day examining ground for trail, wire at some distance to our right, good feed the whole distance. Good trail can be found by crossing small stream and following left of lake.

Thursday, July 26, 1906.—Left camp at 5.30 a.m., crossed small stream between two lakes and followed left bank of lake for some distance, timber light and open ground, soft in places. Came under wire again about 5 miles out of camp, followed right of way to Nakina river, arriving at telegraph station at 10.20 a.m., distance travelled, about 12 miles. Bad canyon coming to river, only one place to come down and cross, trail well marked here. Reported arrival to O.C., 'H' Division by wire, receiving the following reply: 'Conrad, July 26, 1906. To Insp. McDonell, Nakina. Comptroller desires you to proceed from Telegraph Creek to Hazelton and report best route between those points. Sgd. A. E. Snyder.' On receipt of this I discharged Indian

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Taku Jack, as he did not know the country between Telegraph Creek and Hazelton. I allowed him 12 days' work, that gives him time to get back to Atlin while drawing pay.

Friday, July 27.—Left Nakina at 6 a.m., fording the river. This would be a bad stream at high water, as it is a regular box canyon. Bad hill to climb, but could be graded for trail. Country much easier, more open, with wide open valley which we followed for 18 miles, camped for night near cabin, one of telegraph shelters, good feed, good trail can be made over this portion with little work.

Saturday, July 28.—Left camp at 6 a.m., travelled about 22 miles, first 13 miles country has been burnt over and some very soft places were encountered, passed two cabins, telegraph stations, last 9 miles through fine open valley, camped for night near small stream, branch of Nahlin river, salmon are running in it. Good feed for last 9 miles and good trail can be made with very little work.

Sunday, July 29.—Left camp at 5.30 a.m., arrived at Nahlin telegraph station at 1 p.m., passed three cabins, linemens' shelters. At the half-way cabin there are about 10 pairs bob-sleighs, left here by construction party. Came on the McKenzie & Mann pack trail about 3 miles from Nahlin river, this is a good trail, dry and hard, crossed Nahlin river on good bridge about 100 feet long, with 3 piers. The Nahlin river is fairly teeming with salmon and fish of all kinds. Passed through some good timber about 10 a.m., this is the best timber I have seen since I left Atlin. I am informed that no one has been over the McKenzie & Mann pack trail, from Nahlin to Teslin lake for about three years, and that the trail is badly blocked by fallen timber. Distance from here to lake, about 60 miles, good feed the whole distance.

Monday, July 30.—Left camp at 6 a.m., camped for night about 20 miles south of Nahlin telegraph station, good feed and water, country very open, trail good, under or near wire entire distance.

Tuesday, July 31.—Heavy rain this morning, left camp at 6 a.m., travelling through fine open valley, trail leaves telegraph line for about 5 miles, a few soft places, could easily be repaired. Camped for night on small stream shown on map as Dudidontu river. No wood near bank of river, open valley.

Wednesday, August 1.—Left camp at 6 a.m., very hard frost last night. Crossed Dudidontu river about 3 miles from camp, trail crosses Sheslay summit and follows down coulee to Sheslay river. Arrived at Sheslay telegraph station at 10 a.m. Camped for day. Salmon very numerous in river, good feed entire distance.

Thursday, August 2.—Left camp at 5 a.m., travelled through some very fine timber. A number of Indians employed clearing ground for farm by Mr. H. J. Hyland, at Telegraph Creek, 27 miles from that place. It is a nice looking place, but poor soil, light and sandy. Camped for night on small stream called the Tahtlin, salmon very numerous. Good feed entire distance, good trail.

Friday, August 3.—Left camp at 5 a.m., travelled through some very fine, dry timber for about 4 miles, the country then opened out. Good feed and good trail entire distance. Arrived at Telegraph Creek at 3 p.m. Distance travelled, 23 miles. Stopped at Hudson's Bay's store and corralled horses, feed poor near town. Reported arrival to O.C. 'H' Division by wire. Stopped over at Telegraph Creek for two days (4th and 5th), to rest horses and make inquiries about trail to Hazelton. From information received, the government trail seems to be the shortest and best.

Monday, August 6.—Left Telegraph Creek at 9 a.m., Indian taking our supplies up to crossing of Stikine river, 2 miles above mouth of Telegraph creek, by boat. We arrived at crossing about 10 a.m., crossing the saddlery, &c., in boat and swimming the horses. The Stikine river is narrow at this point and makes a good crossing. It would be a good place for bridge. Had everything over by 11 a.m., and made a start for Hazelton. First 5 miles up hill, through timber, and some soft places. Crossed old cattle trail about 2 miles out from river. Camped for night at small lake 5 miles from river. Feed poor.

Tuesday August 7.—Raining all night and still raining, left camp at 5 a.m., passed one of J. H. Galbraith pack trains loaded with supplies for telegraph stations as far south at Echo lake—met one of his trains returning from there. Trail very rough and

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hilly, poor feed. Camped for night at Four-mile creek. Horses had to climb mountain to get feed.

Wednesday, August 8.—Left camp at 6 a.m., crossed Raspberry creek on bridge. Camped for night at Iskoot summit, above timber line. Good feed, but trail rough and hard on horses.

Thursday August 9.—Heavy rain this morning, left camp at 6 a.m., camped for night at Little Iskoot river. Trail over summit for about six miles good; no timber. After crossing summit came down into very heavy timber and some soft places on trail. Good feed in valley of Little Iskoot. Passed one tent and one cabin used by linemen as shelters.

Friday, August 10.—Left camp at 6 a.m., arrived at Big Iskoot river, 11 a.m. Got use of boat from men of telegraph station and crossed river, swimming horses. Made camp on south side of river. This is a dangerous stream at high water, the packers upset boat and lost about a thousand pounds provisions last trip. Good trail to-day and good feed on south side of Iskoot.

Saturday, August 11.—Left camp at 6 a.m., trail good for first 6 miles, crossed Six-mile creek on bridge. This is a regular canyon with steep long hills on both sides, hard on horses. Arrived at Twenty-five Mile Cabin at 2.30 p.m., telegraph station here. Distance travelled 20 miles, passed one shelter, halfway between Iskoot and Twenty-five Mile Cabin. Good timber all through here, swamp grass the only feed for horses. Raining all afternoon.

Sunday August 12.—Raining all day, stopped over for day to rest horses and men.

Monday August 13.—Left camp at 6 a.m., camped for night at Pup lake. Trail bad, many steep and hard hills, very hard on stock, poor feed, heavy timber.

Tuesday, August 14.—Left camp at 6 a.m., arrived Echo lake at noon, got use of boat from telegraph men and crossed Ingaso river, swimming horses. This is another dangerous stream at high water. Camped on south side of river, poor feed. Trail very badly grown over with brush from Pup to Echo lakes.

Wednesday, August 15.—Left camp at 6 a.m. Trail leads up side of mountain for about 4 miles, hard climb and many soft places. Horse Regt. No. 2927, ridden by Const. Monson, showing signs of weakness. Camped for night at big slide, good feed on side, passed telegraph repair gang about 12 miles out from Echo lake. Raining all day, makes it hard on the horses.

Thursday August 16.—Left camp at 6 a.m., had considerable chopping to get through, trail badly blocked by fallen timber, passed through some very good timber and camped for the night in beaver meadow. The beaver had dammed the creek and flooded the whole flat, very large dam; beaver must be numerous. Poor feed for horses.

Friday August 17.—Left camp at 5 a.m., arrived at Nass river at 3 p.m., had considerable work in clearing trail of fallen timber, had to swim horses across Salmon creek. Beaver have dammed up the stream. Camped for night on top of hill, very bad day both on men and horses. Trail is washed out at river, had to make a detour of about 3 miles to get down to the river, very bad hill. Horse Regt. No. 2927 very tired, rest of horses doing well.

Saturday, August 18.—Left camp at 6 a.m., had to line horses across Hawk creek, arrived at crossing of Nass river at 1 a.m. Horse Regt. No. 2927 very tired, gave Const. Monson horse Regt. No. 2940, used small boat belonging to telegraph men and put all our outfit across the river leaving horses on north side of river on account of feed. There is a foot-bridge across this stream but a man would have to be a tight-rope walker to cross it, all those who I have seen use it had to cross on their hands and knees. Made camp on south side of river. Trail fairly good after getting on river bottom.

Sunday August 19.—Left camp at 6 a.m.; trail follows up north side of river, it is hilly and rough; passed Ninth Cabin telegraph station in a.m., and camped for

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night $3\frac{1}{2}$ miles past cabin; good feed. Ninth Cabin is on Rochester creek which flows into the Nass.

Monday, August 20.—Left camp at 6 a.m., camped for night at Little Nass summit, good feed, the first the horses have had for some days. The wire is held up on small cross poles about 10 feet above ground, the regular poles being all broken down by snow. The wire is in this condition for about $1\frac{1}{2}$ mile, this is above timber line.

Tuesday, August 21.—Left camp at 6 a.m., arrived at Eight Cabin telegraph station at 10.20 a.m. Good trail over summit crossed on snow slide which carried the horses. Camped for day to rest horses at Eight Cabin, trail fairly good.

Wednesday, August 22.—Left camp at 6 a.m., and camped for night at slide. Trail very rough, many hills, hard on horses, feed poor.

Thursday, August 23.—Left camp at 6 a.m., arrived at Seventh Cabin at noon, camped for day. Horses tired, trail rough and feed poor. Met repair gang, 5 men and 8 horses repairing telegraph wire.

Friday, August 24.—Stopped over for day at Seventh Cabin to rest horses.

Saturday, August 25.—Left camp at 6 a.m., arrived at Little Nass river at noon, crossed on bridge and camped for day on south side, feed fairly good and trail much easier on horses to-day. Bridge needs repair.

Sunday, August 26.—Departure this morning was delayed by one of those unpleasantnesses incidental to travel with pack train, namely, horses strayed, and a start was not made until 8 a.m. After going a short distance horse Regt. No. 2927 became completely exhausted, and I gave orders to Sergt. Todd to shoot it, which he did. Camped for night at first good feed we came to, trail rough and hard on horses.

Monday, August 27.—Left camp at 7 a.m., passed Sixth Cabin telegraph station in a.m. Met two prospectors, Messrs. Williams and Reed, with 6 horses. They informed me that they were going to turn back from here. Camped for night at Black Water. The old cattle trail comes in here and joins the government pack trail. Trail much better and feed good. Indian family make their home here. Salmon running in river. Barrett & Co., pack train camped here, they are returning to Hazelton. Raining all day.

Tuesday, August 28.—Left camp at 6 a.m., passed fifth cabin telegraph station at 12.20 p.m., camped for night at Indian village. Country much more open, nice valley, good feed and good trail, raining all day.

Wednesday, August 29.—Left camp at 6 a.m., and camped for night at foot of 'S' of 'B' hill, this is a hard hill on stock. We are a few hundred yards from Skeena river. Feed good and trail good, except for hill. Raining all day.

Thursday, August 30.—Left camp at 6 a.m., passed fourth cabin telegraph station at 10 a.m., trail follows right limit of Skeena river. Indian trail to Bear lake joins government pack trail here. Bear lake trail very indistinct, it is only a moccasin track, although some horses have been taken over it to Bear lake. Camped for night on top of Poison mountain, this is also a hard climb on horses, otherwise trail good. Poor feed on mountain. Raining all day.

Friday, August 31.—Left camp at 6 a.m., passed third cabin telegraph station at 10 a.m. An Indian named Chas. Martin is the operator here. Camped for night at Indian village Old Kuldo. Horse Regt. No. 2914, ridden by Sergt. Todd, is very tired, trail good and good feed. Indian trail crosses the Skeena on foot bridge here going to Kis-gegas Indian village. This trail goes over mountain and cannot be used with horses, it is only a short cut taken by the Indians from Kuldo to Kis-gegas. Raining all day.

Saturday, September 1.—Left camp at 6 a.m., passed second cabin telegraph station at noon, camped for night on a big open flat on bank of Skeena river. Good feed and good trail. One of Barrett & Co.'s pack trains is camped here. Raining all day.

Sunday, September 2.—Stopped over for day to rest horses and men.

Monday, September 3.—Left camp at 6 a.m., camped for night at Mule camp, passed one cabin used as shelter by linemen. Trail bad, many soft places on account

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of continuous rains. Raining all day. Horse Reg. No. 2914 very weak. Both of Barrett & Co.'s pack trains camped near us for night.

Tuesday, September 4.—Left camp at 6 a.m., passed first cabin telegraph station at noon. Camped for night on bank of Kispiox river. Trail good, and good feed. This is a fine open valley, light timber, easy travelling.

Wednesday, September 5.—Left camp at 6 a.m., passed telegraph lineman's house and camped for the night 4 miles from Kispiox, Indian village. Passed a couple of nice hay meadows, some hay cut and stacked and meadows fenced. A few settlers have taken up land in this valley, this summer. Some coal has also been found in this vicinity.

Thursday, September 6.—Left camp at 7 a.m., arrived at Kispiox, Indian village, on banks of Skeena river, at 10 a.m. Crossed the outfit in a canoe, swimming the horses. The Skeena is about 100 yards wide at this place. Had everything across by 1 p.m. Had lunch and left for Hazelton at 2 p.m., arriving there at 4.30 p.m. Trail good and good feed the entire distance. Reported arrival to O.C. 'H' Division by wire. Stopped at Omineca hotel. Raining all day.

Having received orders, by wire, to return to White Horse by boat, I arranged with Mr. B. Barrett, of Barrett & Co., to winter our horses at \$20 per head and store our saddlery and camp outfit free, horses to be delivered at Hazelton when required. I handed horses and outfit over to him on September 10, and with Sergt. Todd and Const. Monson, took first boat for White Horse, leaving Hazelton on the H.B.C. steamer *Hazelton* on September 20, arriving in Port Essington at noon September 21, and left Port Essington on September 24, on ss. *Princess Beatrice*, arriving in Skagway on September 26, Sergt. Todd and Const. Monson taking train for White Horse on that date, and I returning to White Horse on September 27.

ROUTE RECOMMENDED.

Leaving Atlin, follow wagon road to McKee creek, then, crossing creek, keep straight on crossing O'Donnell river, then follow Black Pine ridge to Indian trail to Nakina river crossing opposite telegraph station, then follow pack trail to where it joins McKenzie & Mann's pack trail, 3 miles north of Nahlin river, then follow McKenzie & Mann's pack trail to Telegraph creek.

Then crossing Stikine river 3 miles above mouth of Telegraph creek, take Old Cattle trail to Black Water, where it joins Government Pack trail, then follow Government Pack trail to Hazelton.

Ten men, with proper equipment, starting from Atlin July 1, will open trail to Nahlin river, where it joins McKenzie & Mann's pack trail, in one season.

Six men starting from Telegraph creek July 1, would open trail south to Klappan river in one season.

Six men starting from Hazelton June 15, would open trail north from Black Water to Klappan in one season.

If this is done and pack trail from Omineca mines to Hazelton is followed it would give open trail from Manson creek to Atlin, distance 790 miles, leaving only that portion from St. John to Manson creek to be opened up. This would follow the trails most prospectors take, and keep in touch with what little civilization there is, and touch all navigable streams where supplies can be replenished, and keep in touch with telegraph communication from 9 miles south of Hazelton to 5th Cabin, and from Telegraph creek to Atlin.

INDIANS.

Telegraph Creek.—All Indians in this district are self-supporting, a few families reside in the town of Telegraph, but the Indian village is at Tahtlin river, 6 miles above Telegraph. They are a hard-working lot, making their living by fishing, hunting, trapping and packing. A number of the younger men are employed as regular packers

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by Mr. J. H. Galbraith, H.B.C., and Mr. H. J. Hyland. All speak in the highest terms of the Indians as trustworthy and good men.

Skeena.—All Indians in this district are also self-supporting and appear to be in a prosperous state, all have good houses and most of them horses. Some of the Indians near Glen Vowell, on Skeena, own and operate a steam saw-mill. All Indians on the Skeena river belong to different denominations. All Indians of the Babine tribe and the interior belong to the Roman Catholic church. The Rev. Father Coccole, the present missionary, has great influence with them. The Skeena Indians give considerable trouble in not complying with the fishing regulations. Warrants had been issued for 9 Babine Indians in connection with this, but the prisoners were rescued and the constables assaulted. On September 14, while I was in Hazelton, the following petition was signed by 65, which was all the white residents in Hazelton and vicinity at the time, and mailed to the Hon. Richard McBride, Premier of British Columbia, on September 20, 1906:—

HAZELTON, SKEENA RIVER, BRITISH COLUMBIA,

September 14, 1906.

To the Hon. RICHARD MCBRIDE,

Premier of British Columbia.

DEAR SIR,—We, the residents of Hazelton and district, request that you ask the Dominion government for a force not less than 100 Royal Northwest Mounted Police to be stationed here for the coming winter.

The reason for this request is in consequence of a decided feeling of unrest amongst the Indians in this part of the country, which can only be dealt with by the government by firmness.

The Indians are naturally annoyed at the different encroachments of the white man, not only in the matter of land, which they have cherished as 'their hunting grounds for generations, but also on their fishing rights.

The present attitude of the Babine tribe is certainly serious, warrants have been issued, but the prisoners were rescued and the constables assaulted, and with the present available force cannot be executed.

Summonses have been rudely disobeyed, and all fishery regulations are defiantly ignored.

Two murders were committed this spring by Kitikshan Indians, several attempts to find and catch the murderers having proved unsuccessful, the Indians naturally gather that the law is powerless in regard to their case.

The Dominion government veterinary inspector ordered a round-up of Indian horses, for testing for glanders, this was set at defiance by the Hag-Will-gate and Morice-town Indians, notwithstanding the combined reasoning and persuasive efforts of the Indian agent, the bishop and priest.

This state of affairs is certain to spread if not dealt with at once, and a speedy and effective settlement would avert any further trouble if done justly and generously, but with decided firmness.

Trusting you will give this your earnest consideration, and your petitioners as in duty bound will ever pray.

We have, sir, the honour to be,

Yours very respectfully,

In connection with the trouble with the Babine Indians, I gave you a special report, dated September 22, which covered everything in that connection up to that date.

ATLIN MINING DIVISION, CASSIAR DISTRICT.

The town of Atlin, which could boast of its 6,000 population in 1899, is now reduced to about 400 in the whole district. Although reduced in population this

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district has a promising future. Many companies have extensive operations on the different creeks. On Spruce, the Northern Mines, Ltd., have a big steam shovel plant now in operation, taking bites weighing a ton and a half of gravel and dumping it into the sluice boxes to be washed. This shovel is taking out about 400 yards a day. Besides this company, and the many individual claims now working, the Spruce Creek Power Company has a hydraulic plant in operation. Another steam shovel is being installed on Pine creek by the Atlin Consolidated, in which the Guggenheimers are interested. The Pine Creek Power Company and the North Columbia Gold Mining Company have both hydraulic plants working just below the Atlin Consolidated, and besides individual claims in the district are the French Company (S. M. de la C. B.), on Boulder creek, The Otter Creek Hydraulic Company and two hydraulic plants on McKee creek.

Very little development in quartz has been done beyond the assessment work necessary to hold the claims.

NORTHERN PORTION OF CASSIAR DISTRICT, INCLUDING LIARD AND STIKINE MINING DISTRICTS.

Telegraph creek, head of navigation on Stikine river, two stores H.B.C. and H. J. Hyland, one saloon and government office. Everything has to be packed from here to Dease lake, a distance of 90 miles, from there by small boat across the lake and down Dease river. Very little mining is going on in this district. Berry Creek Mining Company on Thibert creek, on the success of which the immediate future of this camp largely depends, had not taken anything out up to the time I passed through the district. This company has a force of 30 men employed, and have a saw-mill on the shore of Dease lake, and have gone to considerable expense in a new ditch line to bring in a supply of water from Dease creek. This ditch line takes the water from one tributary over a low divide and drops it into a second tributary, and from a point some distance further down this second tributary the water from both tributaries is taken over another divide and run into the head waters of Thibert creek, where, from a lake some 10 miles further down, another ditch line takes the water. This ditch line, it is estimated, will now give a constant flow of 1,000 miner's inches a day (about 15,000,000 gallons). This work was about completed when I passed through Telegraph creek.

SKEENA AND OMINECA MINING DISTRICTS.

Hazelton, head of navigation on Skeena river, four stores and two hotels, population about 60 white people and 200 Indians. The only placer mining going on in this district is 200 miles north-east in Omineca district and at Lorne creek, 80 miles down river from Hazelton. At the latter place the Dry Hill Hydraulic Company have a force of men working. This company lost \$7,200 in working their ground last year, but expect better result this year.

A large number of quartz claims have been recorded and considerable development work done, one company having 22 men working on property in the Bulkey valley. Considerable coal has been discovered in that vicinity also.

GENERAL.

I had the pleasure of visiting the hospital at Hazelton, and found everything most satisfactory. Dr. and Mrs. Wrench and staff of nurses seem to take great interest in the work. Dr. Wrench is also experimenting with various varieties of fruit and vegetables in the fine garden attached to the hospital, and seems to be meeting with excellent success.

An event of interest, on August 19, was the opening of the first county court in Hazelton. Judge Young was there for that purpose and announced that he intended visiting Hazelton twice a year for the purpose of holding court.

On July 20, Mr. Robertson, provincial mineralogist, and his party left Hazelton for a trip across the province by way of Babine and Omineca, and thence through the Peace River country.

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On September 8, Mr. Walkey and 5 special constables, with 7 pack horses and 5 saddle horses, left Hazelton by way of Babine and north Tacla lake for Bear lake in search of Indian murderer 'Simon Gun,' who had been seen in that vicinity by some prospectors.

Glanders broke out amongst the horses in the Bulkley valley last winter and the government have had a qualified veterinary surgeon on the ground since May last. Up to September 20, he had inspected 700 horses, out of which he had destroyed 104. A number of Indian horses had still to be examined, and he was having some trouble in having the Indians produce their horses.

The Bulkley valley is attracting quite a number of settlers. A wagon road is badly needed in that section as everything at present has to be packed from Hazelton. The people are looking forward hopefully to the impetus that they expect will follow the advent of the railway.

I have the honour to be, sir,

Your obedient servant,

A. E. C. McDONELL, Insp.,

Commanding 'H' Div. Patrol.

APPENDIX D.

PATROL REPORT OF INSPECTOR R. Y. DOUGLAS, ON PELLY RIVER.

DAWSON, Y.T., August 24, 1906.

The Officer Commanding,
'B' Division, R.N.W.M. Police,
Dawson, Y.T.

SIR,—I have the honour to report that pursuant to your instructions of the 13th inst. to make a patrol up the Pelly river with the steamer *Vidette*, and to take with me any prospectors with their outfits who wished to go and to land them as near their destination as possible, also to render assistance to any one we might meet who was in need of it. We left Dawson at 2.45 p.m. of the 14th inst. with the following prospectors on board: Daniel McIntyre and Walter Scott Johnston for Glenlyon creek with about 1,200 lbs. provisions, Martin T. Anderson for 35 miles above Hoole's canyon with 1,400 lbs. provisions, Winslow D. Morgan for Hoole's canyon with 2,500 lbs. provisions, &c., and material for building a poling boat. We reached Selkirk, opposite the mouth of the Pelly at 9.30 p.m. of the 16th inst. After inquiring if there were any prospectors there who wished to go up with us, and finding none, we left Selkirk, crossed the Yukon and tied up at the mouth of the Pelly river for the night. We were told at Selkirk that our chances were very poor of getting up the Pelly so late in the season. We started at daylight on Friday the 17th and made fair progress all day. We found the water thin in places and at times were greatly bothered by smoke from bush fires on both sides of river, making it necessary to tie up until the wind changed and cleared the smoke away so that pilot could see the water ahead of the boat. At 6 o'clock we tied up for the night and all hands started to cut wood which was loaded on the forward deck in long lengths and cut for the boiler while running.

Saturday the 18th pulled out at daylight and made good time to Granite canyon which we reached at 6 a.m., on trying the channel used a year ago it was found to be too shallow and we were forced to drop down stream. While doing so we hit a rock which started a butt on the starboard side of the bottom which forced us to go ashore and make repairs at once, which was done by putting on soft patch from the inside. We also un-

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loaded 4 cords of wood to lighten the back part of the boat so that the wheel would turn faster and give her more power. We then tried it again, this time taking a different course, but were again forced to drop back. At the third trial we succeeded in getting through but at considerable risk. The difficulties we encountered were due to the low stage of the water in a very narrow channel dotted all over with large boulders 2 and 3 feet above the water.

We made good time for the balance of the day, reaching Horsfal's cabin at mouth of McMillan river at 1.10 a.m. We landed, but found the cabin locked up and a notice on the door to the effect that Horsfal and family were up the McMillan fishing. We left a notice that the *Vidette* was up the river and would be back in a few days. We ran up to 9 p.m. looking for dry wood but were forced to land and take anything we could get. Sunday the 19th very foggy at daylight, ran till noon when we stopped for wood at a good spot and put on all the boat could carry; made good time all the afternoon until about 5.30 p.m., when the chief engineer reported that there was something wrong with crank shaft, and after watching it for a time both the captain and engineer decided that it was broken under the port eccentric and that it would be impossible to go any further. At this time we were about 10 miles above Tunnell creek and 160 miles from mouth of river. As it was raining we postponed landing the prospectors and their freight until next morning.

Monday the 20th, started to unload at daylight, the prospectors at once forming camp while the crew of the *Vidette* made such repairs as would enable the boat to run under a half-head of steam. By noon we were ready to leave on our return trip; before starting the prospectors expressed their thanks for treatment received and satisfaction at getting up river so far. We ran one-third speed till 9.05, and tied up for the night. Starting the next day, the 21st, we reached the McMillan at 6.15, landed at Horsfal's cabin and found they had not yet returned, shoved mail for them under door with note stating how it got there and continued down stream. After losing three hours on a bar, reached Granite canyon about 1 o'clock, getting through without accident, but found it impossible to land for the wood we left going up. Did not stop again until we reached the ranch of Messrs. Menard and Grenier on right limit of Pelly river about 5 miles from mouth. They have about 90 acres under cultivation, chiefly hay, oats and potatoes; they had a good crop of hay, but the oats were a failure owing to an exceptionally dry season. Stopped once more at the Pelly Crossing roadhouse, owned by J. Hoskins, examined outside of premises and found all secure, arrived at Selkirk at 5.45, from where I at once wired you regarding accident. While waiting your reply, inspected detachment, a report of which you have received. Left Selkirk for Stewart river at daylight next morning, August 22nd, arriving there at 4.45, inspected detachment during evening and took aboard Const. Simons for duty in the post, left for Dawson at daylight the next morning, August 23rd, arriving there at 10.45. Between the time of passing Messrs. Menard and Grenier's ranch on the way up, and our return we met no one, although there were Indian canoes drawn up on the banks at different places. If this patrol is to be made another year I would recommend its being made earlier in the season although we had little trouble with bars. Going up river the water was so shallow the boat made little more than a mile an hour; it would also make it certain that the boat could get through Granite canyon with little, or no, bother other than lining.

I have the honour to be, sir, your obedient servant,

R. Y. DOUGLAS, Inspector.

R.N.W.M. Police.

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APPENDIX E.

PATROL REPORT OF CORPORAL H. G. MAPLEY, DAWSON TO FORT
MACPHERSON.

ROYAL NORTHWEST MOUNTED POLICE,

YUKON TERRITORY, "B" DIVISION, OFFICE,

DAWSON, Y.T., April 5, 1906.

The Officer Commanding,

R. N. W. M. Police, "B" Division,

Dawson, Y.T.

SIR.—I have the honour to make the following report of my patrol to Fort Macpherson and return.

On Wednesday, December 20, 1905, accompanied by Staff-Sergeant Fitzgerald, Constables Forrest and Walker, Louis Cardinal and Indian Sam Smith (the two latter being guides), I left Dawson on patrol to Fort Macpherson, with 5 dog teams and toboggans. Inspt. Taylor accompanied this party with a dog team as far as the Mayo lakes. Leaving Dawson at 8.30 a.m. we arrived at Hunker creek detachment at 1 p.m., remaining there for lunch, and leaving for Dominion creek detachment at 2.30 p.m., where we arrived at 7 p.m., distance first day, 35 miles. Our dogs were very tired when we arrived at Dominion, in fact, so much so that they would not eat their food. The distance was too far for the first day, although Const. Opsahl with team had accompanied us, hauling the heavier part of our loads. Weather fine.

Left Dominion 7 a.m., on the 21st, and arrived at Jensen creek at 11.25 a.m., where we camped for the day, as the dogs were too tired to go further that day. Inspt. Taylor and Const. Opsahl and team left in p.m. for King's roadhouse. Distance travelled by party, 13 miles. Weather fine.

Left Jensen creek at 7 a.m., on the 22nd, and arrived at King's roadhouse at 1 p.m., where we camped and arranged our loads in p.m. The trail over the summit was very heavy. We passed Const. Opsahl and team on the summit on his way back to Dawson. Dogs still tired and would not eat. Distance travelled, 17 miles. Weather fine.

Left King's roadhouse at 7 a.m., 23rd, and remained one hour at Gravel lake for lunch and arrived at Barlow roadhouse at 4 p.m. and camped for night. Roads very heavy, dogs getting stronger and eating a little of their feed. Distance travelled, 24 miles. Weather, snowing all day.

Left Barlow roadhouse at 8 a.m. and remained one hour at the mouth of Clear creek; Stewart river, for lunch, and arrived at the McQuesten detachment at 4.15 p.m., 24th. Roads very heavy, which caused the dogs to very nearly play out; got some dried fish here which the dogs ate, and made a good meal. Distance travelled, 22 miles. Weather fine.

Left McQuesten detachment on the 26th, having laid over Christmas day, 7.30 a.m. accompanied by Consts. Dempster and McLennan and one dog team, and arrived at four miles above Moose creek 4 p.m., and camped for the night, breaking trail all day with snow-shoes, distance travelled, 20 miles. Weather fine.

Left camp at 8.15 a.m., 27th, and arrived at Crooked Creek roadhouse at 3.45 p.m., where we camped for the night, roads very heavy, distance travelled, 12 miles. Weather fine, but very windy.

Left Crooked creek at 8 a.m., 28th, Consts. Dempster and McLennan returned to McQuesten with a Mr. Potter and his sick wife. Arrival at Square cabin at 3 p.m.,

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and camped for the night. Distance travelled, 13 miles. Roads very heavy, on trail snow-shoes all day. Weather snowing all day.

Left Square cabin at 7.30 a.m., 29th, camped one hour at 4 p.m. to rest dogs, and arrived at Mayo detachment at 8.30 p.m. Dogs had a good feed at Mayo, of dried meat. Roads very heavy. Distance travelled, 23 miles. Snowing all day.

Remained over all 30th at Mayo tying up meat, &c.

Remained over all 31st at Mayo arranging loads and cooking bread (bannock).

Left Mayo January 1, 1906, at 7.30 a.m., accompanied by Sergt. Beyts and dog team, had lunch at Minto bridge and arrived at Fields creek at 6.30 p.m., camped for the night. Roads very heavy. Distance travelled, 20 miles. Snowing all day, 35 below zero.

Left Fields creek at 7.30 a.m., 2nd, had to lay over one hour at noon to rest dogs, trails very, very heavy, and arrived at Mayo bridge 3.30 p.m., and camped at roadhouse for night. Distance travelled, 10 miles. Weather fine, 9 below.

On the 3rd we lay over all day at Mayo bridge, where we hired W. Moore to accompany us as a trail-breaker.

Left Mayo bridge at 7.30 a.m., 4th, and arrived at Discovery, on Duncan creek, at 2 p.m., and camped for the night. Here we had to send three men on ahead to break trail, as the snow was so deep. Distance travelled, 11 miles. Weather fine, 20 below.

Left Discovery, on Duncan, at 7.45 a.m., on the 5th, and arrived at Hanson's cabin, on Kerry lake, at 3.30 p.m., and camped for the night. Sent three men on to break trail. Distance travelled, 10 miles. Weather fine, 24 below.

Left Hanson's cabin at 8.15 a.m., on the 6th, and arrived at McIntosh's cabin, on McQuesten lake, at 1.30 p.m., and camped. Water very bad on the lake, and will have to camp to-morrow to break trail and let it freeze. Const. Forrest and Indian Sam went 3 miles ahead to break trail. Const. Forrest killed two caribou. Distance travelled, 10 miles. Weather fine, 38 below. Const. Forrest froze the fingers of his right hand, but they soon recovered.

On the 7th Const. Forrest, Cardinal and Indian Sam left at 7.30 a.m., and broke trail 13 miles, and returned at 8 p.m. Reported water very bad on the lakes. Forrest shot two caribou and Sam one moose about 10 miles from the camp. Gave the dogs a good feed of fresh meat. Inspt. Taylor, Sergt. Beyts and two dog teams left for Mayo this a.m. We were very sorry to lose Inspt. Taylor, as he had been a great help to us from Dawson, taking his share of the loads. Forrest's hand very sore to-day. Weather fine, zero.

Left McIntosh's cabin on McQuesten lakes at 8 a.m. on the 8th and travelled 10 miles and camped at 2 p.m. Made a cache of one caribou and part of a moose so that we could pick it up on the return trip. Followed McQuesten lake to the end and then followed the edge of the hills for about seven miles. Weather 48 below, strong winds all day.

Left camp at 7.45 a.m., 9th, and travelled through a valley from one and a half to four miles wide, high hills on both sides with very small timber, snow very deep and could only made ten miles, camped at 2 p.m. Four men went ahead to break trail, weather fine and 38 below.

Left camp at 8.15 a.m. and struck a lake and went one mile on it, found it too cold and windy to travel and camped in an old cabin at 9 a.m., distance travelled 2 miles, weather very windy and 61 below in a.m. and 48 below in p.m.

Left camp at 7.45 a.m. on the 11th and crossed three small lakes and then struck a small creek and followed it for about eight miles when we came to the Beaver river about 45 miles from the head, camped here about 4.45 p.m. About nine miles from the Beaver river we came to an old toboggan trail, followed it and found two hunters named Christie and Williams who were camped on the Beaver river. Snow very deep, distance travelled 16 miles, weather 52 below in a.m. and 61 below in p.m., very windy.

Left camp at 7.30 a.m. on the 12th, but only made one mile as Const Walker could not stand the cold weather and travel in it. Snow very deep, weather 62 below all day and very windy.

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On the 13th as it was 65 below zero we remained in camp.

On the 14th as it was 66 below zero we remained in camp.

On the 15th we left camp at 7.30 a.m. and followed the Beaver river for 16 miles and went into camp at 3 p.m., snow very deep with some water on the river. Weather 48 below in a.m. and 28 below in p.m.

On the 16th we left camp at 8 a.m. and went up a small creek about a mile and a half and found we were going in the wrong direction and had to return and followed the Beaver for ten miles and camped in a cabin about two miles above Braine creek, snow very deep with water on the ice, weather 18 below in a.m. and 38 below in p.m.

On the 17th we remained in camp all day but sent four men ahead to break trail up Braine creek; they returned at 4 p.m., went about 11 miles; Cardinal shot a calf moose; Staff Sgt. Fitzgerald and myself were employed all day fixing loads. Sam, the Indian, complained of being sick with a sore back and leg, claimed too much cold; there has been something wrong with this man ever since we left Dawson, weather 44 below in a.m., 48 below in p.m.

On the 18th we left cabin at 7.45 a.m. and travelled the Beaver and then turned up Braine creek and followed it to its head about 14 miles, and then across two small lakes on the summit and camped in a small cabin at 7.45 p.m.; had a very hard day on the dogs, and they just about played out. Braine creek is very nearly all glacier with a canyon about the centre which has to be portaged in the summer. There are some very bad places on it with open water. Nearly all of the party got wet and we had a narrow escape from freezing. I should judge that there is a wind blowing on this river nearly all the time as there are stretches of perfectly clear ice. The climb cannot be noticed. There is very little timber on this creek or the summit. There are two small lakes on the summit; the snow on the summit is very deep and I saw Sam, the Indian try to see how deep it was and thrust a seven foot pole into it without being able to touch bottom. Distance travelled 18 miles, weather 50 below in a.m. and 54 below in p.m.

On the 19th we had to lay over and sent four men ahead to break trail. Weather 54 below in a.m. and 58 below in p.m.

On the 20th we laid over on account of cold weather, it being 64 below in a.m. and 59 in p.m., and a strong wind blowing all day.

On the 21st we left camp at 8 a.m. and followed a deep ravine for about three miles and then struck Nash creek which we followed to its mouth, a distance of about 16 miles, when we came to the Big Wind river and went into camp at 7 p.m. near a party of McQuesten Indians who were hunting. The trail, which we had broken two days before, was very good all morning but we struck deep snow again in the afternoon. Nash creek is about 70 yards wide. We saw two moose but could not get a shot at them. Distance travelled 19 miles, weather 52 below in a.m., 49 below in p.m.

On the 22nd we left camp at 8.30 a.m. and travelled down the Big Wind river, but had to go into camp at noon owing to the strong head wind blowing at that time. This river is well named, and the Indians claim that the wind blows in this locality incessantly. Travelling on the Wind was good, as what little snow there was on it was good, but it was mostly all clear ice. This camp is about 100 miles from Wind City. At this camp we bought about 300 lbs. of moose meat for the dogs from the Indians, paying them \$12 and a little bacon. Distance travelled, 9 miles, weather 48 below in a.m., and 59 below in p.m.

On the 23rd we laid over in camp, wind too strong and cold to travel much. Cardinal and Indian Sam went out hunting moose. Cardinal returned at 6 p.m., having shot one moose about five miles away. Weather 62 below in a.m. and 61 below in p.m.

On the 24th we remained in camp, but sent three sleds after the moose killed by Cardinal. The party returned with the moose about 1.30 p.m. Moose weighed 300 pounds. The weather was 54 below in the a.m. and 52 below in p.m., with very strong winds.

On the 25th we were compelled to remain in camp as there was a strong blizzard blowing all day. Weather 52 below in a.m. and 32 below in p.m.

On the 26th we left camp at 8 a.m. with a blizzard still blowing and which continued until 11 a.m. and from then on a very strong head wind blew all day.

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Travelled 18 miles down the Wind river and went into camp at 3.30 p.m.; trail fair, some water on the river. We used no snowshoes to-day. Weather 38 below in a.m. and 28 below in p.m.

On the 27th we left camp at 7.30 a.m. and travelled 22 miles down the Wind river and camped at 4 p.m. Crossed what is known as the 'barren land.' Went most of the way by land, as travelling on the river was very bad, with water caused by the glaciers. Constable Forrest's dog (John) had to be turned loose on account of frozen feet. Staff-Sergt. Fitzgerald had cramps all day. Distance travelled 22 miles, weather 22 below in a.m. and 20 in p.m.

On the 28th we were compelled to lay over on account of Staff-Sergt. Fitzgerald and Constable Walker suffering with the cramps. Weather 18 below in a.m., zero in p.m.

On the 29th we left camp at 8 a.m. and travelled down the Wind river for 14 miles and camped at 2 p.m. on account of Staff-Sergt. Fitzgerald and Constable Walker again having cramps. Constable Forrest shot a caribou at 11 a.m. and he and Cardinal went hunting in p.m. and got one caribou each about three miles from camp. Constable Forrest is an excellent all around man and a splendid hunter. Distance travelled 14 miles. Weather 22 below in a.m. and 12 below in p.m.

On the 30th we left camp at 8 a.m. and travelled down the Wind river 19 miles and camped at 4.45 p.m. Had a great deal of trouble with the water, and one of the dogs (Ping) had its feet badly frozen. Distance travelled 19 miles, weather 18 below in a.m. and 12 below in p.m.

On the 31st we left camp at 7.45 a.m. and travelled down the Wind river 19 miles and camped at 4 p.m. We passed the Little Wind river at 1.30 p.m. and camped 7 miles below it. Snow very deep again and we had to use snow shoes. Weather 14 below in a.m. and 11 below in p.m.

On the 1st February we left camp at 7.40 a.m. and travelled down the Wind river 18 miles and camped at 3.30 p.m. about two miles below Mount Deception. The snow was very deep and some places covered with water. Had to turn dog Ping loose and neither he nor dog John turned up at night. Distance travelled 18 miles, weather 16 below in a.m. and 16 below in p.m.

On the 2nd we left camp at 7.30 a.m. and travelled down the Wind river 22 miles and camped at 5.30 p.m. one mile above Wind City. Dogs did not turn up, and I reckon their feet are too bad for them to travel. The snow was very deep. Weather 19 below in a.m. and 13 below in p.m.

On the 3rd we left camp at 7.45 a.m. and travelled 7 miles down the Wind river and 6 miles down the Peel river and camped at 3 p.m. Sam went ahead to try and find the portage and returned at 7 p.m. He came to a small river four miles down the Peel which he thought was the way to the portage. Snow very deep. There is a canyon at the mouth of the Wind river about one mile long. Distance travelled 13 miles. Weather 11 below in a.m. and 7 below in p.m.

On the 4th we left camp at 8.10 a.m. and travelled 4 miles down the Peel river and then went up a small creek about two miles and then struck across country about five miles and camped at 3 p.m. Snow very deep and some very bad hills to go over. Sam and I went ahead to find last year's trail and returned at 7 p.m. but were unable to find it. Distance travelled 11 miles, weather 8 below in a.m. and 7 above in p.m.

On the 5th left camp at 7.35 a.m. and travelled about 17 miles in a northeasterly direction and camped at 4.20 p.m. Climbed to the top of the hills and followed the ridge, as the snow was too deep in the valley. We had some very steep hills to climb, but the travelling on the ridge was very good. Distance travelled 17 miles, weather 12 above in a.m. and 18 above in p.m.

On the 6th left camp at 7.40 a.m. and travelled along the hills until 11 a.m. when we found last year's trail which we followed. We travelled in the valley in p.m. and camped at 4.15 p.m. The snow in the valley was very deep, which made travelling very difficult and the snow was also very wet. Distance travelled 16 miles, weather 22 above in a.m. and 10 above in p.m.

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On the 7th left camp at 8 a.m. and followed the old trail to Caribou Born river where we arrived at 2 p.m. and camped. Cardinal followed a moose track and just after leaving camp shot a moose. Sent back and brought the moose to camp. Sam and Cardinal went ahead and broke trail to the top of Caribou Born mountain. Snow very deep, weather 20 above in a.m. and 12 above in p.m. Distance travelled 13 miles.

On the 8th left camp at 7.30 a.m. and went up the mountain and arrived at the top at 9 a.m. when a bad snow storm started, but we went to the other side and camped in the small scrub at 3.45 p.m. Distance travelled 20 miles, weather 2 below in a.m. and 18 above in p.m. The mountain we crossed is a very bald one and we could not see much of it on account of the storm.

On the 9th left camp at 7.45 a.m. and followed the hills one mile and then followed a ravine one mile down to a river, the name of which I could not learn. The river was from 75 to 200 yards wide. We followed this river for twelve miles and camped at 3.45 p.m. The snow was very soft, which made very heavy travelling. In the morning it was half snowing and raining. Struck an old snow-shoe trail about eight miles down the river and found that this was the right branch of the Trail river. Distance travelled, 14 miles ; weather, 18 above in a.m. and 2 below in p.m.

On the 10th left camp at 7.15 a.m. and followed the river for six miles, and then struck the main Trail river and followed it for fourteen miles and then struck the Peel river and camped one mile below the mouth of the Trail river at 4 p.m. The Trail river is from 400 to 500 yards wide with high banks. Distance travelled, 21 miles ; weather, 4 below in a.m. and 15 below in p.m.

On the 11th left camp at 7.15 p.m. and followed the Peel river down three miles down below Colin's camp and camped at 4.15 p.m. The travelling was very heavy. Distance travelled, 21 miles ; weather 12 below in a.m. and 15 in p.m. We were now living on meat only, the other rations having been used up.

On the 12th left camp at 7.20 a.m. and followed the Peel down for twenty-two miles and camped in a native cabin at 4.20 p.m. Travelling heavy ; distance travelled, 22 miles ; weather, 10 below in a.m. and 2 below in p.m.

On the 13th left camp at 7.45 a.m. and followed the Peel down for six miles and came to a small creek which we followed for two miles and camped three hours while Sam looked for portage which he found some three miles further up, and we then crossed the portage for five miles and camped at 5 p.m. Travelling fair. Dogs only received half a pound of bacon each for feed. Distance travelled, 14 miles ; weather 38 below in a.m. and 44 below in p.m.

On the 14th left camp at 7.30 a.m. and followed the portage two miles to Peel river and then seventeen miles down the Peel to a native cabin and camped there at 8 p.m. We had eaten the last bite of food for breakfast, but fortunately came to an Indian camp two miles above the portage where we obtained twenty-four rabbits and gave the dogs each half a rabbit. Distance travelled, 19 miles ; weather, 52 below in a.m. and 48 below in p.m.

On the 15th left camp at 7.45 a.m. and followed the Peel river down to Fort Macpherson, where we arrived at 4.30 p.m. On our arrival at Macpherson all of our dogs were just about played out, in fact one of them, Sandy, dropped about a mile above the fort. Distance travelled, 20 miles ; weather, 51 below in a.m. and 51 below in p.m.

Of the party which left Dawson, Constable Walker was for duty at Macpherson, being sent in from Fort Saskatchewan.

Inspector Howard and Constable Holmden, with two Indian guides, then left for Herschel island with mail on February 18. Constable West, who had been stationed at Fort Macpherson, was to return with my party, and I am forwarding a special report as to this constable. The arrangements made, were that the first party, consisting of myself, Constable West, Cardinal and Moore, were to remain at Macpherson for some ten days' rest and then leave on the return trip ; the second party, consisting of Staff Sergeant Fitzgerald and Constable Forrest and Indian Sam were to leave on the arrival of the patrol from Herschel island. Staff Sergeant Fitzgerald did not re-

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turn, but remained at Fort Macpherson for duty, as did also Constable Walker, and Constable Forrest and Indian Sam returned to Dawson alone.

On February 28, accompanied by Constable West and Cardinal and Moore, with three dog teams of five dogs each, I left Fort Macpherson on my return patrol to Dawson; went into camp 4 p.m. Distance, 16 miles; weather, 25 below in a.m. and 30 below in p.m.

On March 1 left camp at 8 a.m. and made five miles; trail very heavy and had to go into camp at noon. Weather 25 below in a.m., 30 in p.m. Remained in camp all afternoon.

On 2nd we remained in camp all day and rebuilt our loads, as they were too wide. Weather, 22 below in a.m., 25 below in p.m.

On the 3rd left camp at 7.45 a.m. and travelled up the Peel river and camped at 4.30 p.m. Distance travelled, 18 miles; weather, 27 below in a.m., 30 in p.m.

On the 4th left camp at 7 a.m.; travelled up the Peel river to the portage, where we had lunch; then went on and camped at 4 p.m. Trail very heavy; about six inches of snow had fallen during the night. Distance travelled, 20 miles; weather, 37 below in a.m., 40 in p.m.

On the 5th left camp at 7 a.m.; travelled up the Peel and went into camp at 4 p.m. Distance travelled, 10 miles; weather, 38 below in a.m., 25 in p.m. Foot of snow on our old trail.

On the 6th left camp at 7.30 a.m.; travelled up the Peel and went into camp at 5.30 p.m.; snow very deep, very hard hauling for the dogs. Distance travelled, 15 miles; weather, 18 below in a.m., 28 below in p.m.

On the 7th left camp at 7.35 a.m., and travelled up the Peel and went into camp at 4.30 p.m., snow very deep and Moore and Cardinal breaking trail ahead of dogs. Distance travelled seventeen miles, weather 32 below in a.m., twenty-seven in p.m.

On the 8th left camp at 7 a.m., Moore and Cardinal breaking trail ahead of dogs, camped on Trail creek at 5.30 p.m., distance travelled twenty-three miles, weather 24 below in a.m., 30 in p.m.

On the 9th left camp at 7.30 a.m., Moore and Cardinal breaking trail ahead of dogs, camped for night on Trail creek at 5 p.m., distance travelled fifteen miles. Weather, 12 below in a.m., 20 in p.m. Snowing in a.m.

On the 10th left camp at 7 a.m., went up the right arm of Trail creek one mile and then up on Caribou Born mountain, made across it to Caribou Born river where we went into camp at 5 p.m., distance travelled sixteen miles, weather 32 below in a.m., 2 below in p.m., snowing all day.

On the 11th left camp at 7.30 a.m., and travelled along last year's trail where I had blazed it. Cardinal and Moore breaking trail ahead of dogs, went into camp 4.30 p.m., distance travelled eleven miles, weather 7 above in a.m., 12 above in p.m.

On the 12th left camp at 7 a.m. and travelled down Mountain creek and went into camp at 5 p.m., distance travelled twenty miles, weather, 20 above a.m., 2 above in p.m.

On the 13th left camp at 7 a.m., and made the mouth of Mountain creek eleven miles, and then ten miles up the Peel and camped at 6.30 p.m., distance travelled twenty-one miles, weather 10 below in a.m., zero in p.m.

On the 14th left camp at 7 a.m. and made the mouth of Wind river and passed Wind city at 2 p.m., distance travelled eighteen miles, Cardinal and Moore breaking trail, weather 10 above in a.m., and 15 above in p.m.

On the 15th left camp at 7 a.m., travelled up Wind river for eighteen miles and camped at the mouth of Hungry creek at 5.30 p.m., weather 10 above in a.m., 20 in p.m.

On the 16th left camp at 7 a.m., travelled up Wind river, Cardinal broke through the ice up to his waist, all the party got wet to-day. Went into camp at 3 p.m., distance travelled, eleven miles. We had to make a new trail around the hot springs. Weather 10 above in a.m., 10 below in p.m. Blizzard blowing from north all day.

On the 17th left camp at 7 a.m., passed the mouth of Little Wind river at 2 p.m., and camped for night at 5 p.m., distance travelled sixteen miles, weather, 26 below in a.m., 20 below in p.m. Snowing and blowing all day.

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On the 18th left camp at 7.30 a.m., travelling on the Big Wind, had lots of trouble all day with water, all the party got wet, went into camp at 4 p.m. Distance travelled 13 miles, weather 10 above in a.m., 15 in p.m., very windy all day.

On the 19th remained in camp all day to dry ourselves and outfits. Eighteen above in a.m., 10 above in p.m.

On the 20th left camp at 7.30 a.m., travelling up the Big Wind, struck lots of water and had to break new trails, Cardinal shot four caribou, distance travelled 21 miles, weather, 18 above in a.m., 20 in p.m. South wind.

On the 21st Cardinal and myself left camp at 7 a.m., and went after the caribou shot yesterday. We then crossed the barren lands and camped for night at 6 p.m., distance travelled twelve miles, weather 18 above in a.m., 10 in p.m. We had lots of trouble with water all day. South wind.

On the 22nd left camp at 7 a.m., and camped at night about seven miles from Nash creek, distance travelled nineteen miles, weather 20 above in a.m., 15 in p.m., snowing all day.

On the 23rd left camp at 7.30 a.m., reached the mouth of Nash creek at noon, made up Nash creek and across the summit and camped for the night at a cabin where we met a hunter named Frank Williams. Distance travelled twenty-two miles, weather 16 above in a.m., 15 below in p.m.

On the 24th, left camp at Summit cabin at 7 a.m., had lunch on Braine creek and camped on the Beaver river at 5 p.m. in an old hunters' cabin, distance travelled twenty-three miles, weather 12 below in a.m., 5 in p.m.

On the 25th, left camp on Beaver river at 7 a.m. and made cabin on Upper McQuesten lake where we camped at 5 p.m., distance travelled twenty-four miles, weather 2 below in a.m., 10 above in p.m.

On the 26th, left camp at 7 a.m., and camped at 5 p.m., in a cabin on Kerry's lake, distance travelled twenty-three miles, weather zero in a.m., 20 above in p.m., trail on lakes very heavy.

On the 27th, left Kerry's lake at 7 a.m. and had lunch on Duncan creek and camped at 4 p.m. at Mayo bridge, distance travelled twenty-two miles, weather 15 above in a.m., 20 above in p.m., snowing all day.

On the 28th left Mayo bridge at 7 a.m. Discharged Moore here. Camped for lunch at Minto bridge and arrived at Mayo detachment at 6 p.m., distance travelled 30 miles, weather 17 above in a.m., 20 above in p.m., snowing all day.

On the 29th, left Mayo detachment at 7 a.m. and had lunch at square cabin and arrived at Crooked Creek roadhouse at 8 p.m., distance travelled thirty-six miles, weather 20 above in a.m., 39 in p.m.

On the 30th left Crooked creek road house at 6.30 a.m., lunched at Moose creek and arrived at McQuesten detachment at 7.30 p.m., distance travelled thirty-three miles, weather 37 above in a.m., 30 in p.m. Raining in a.m., snowing in p.m.

On the 31st laid over at McQuesten detachment to rest dogs.

On April 1, left McQuesten detachment at 7.30 a.m., and camped at Peterson's roadhouse at Barlow at 5 p.m., distance travelled twenty-two miles, weather 10 above in a.m., 20 in p.m.

On the 2nd left Barlow at 7 a.m. and camped at King's roadhouse at 6 p.m., distance travelled 23 miles, weather 10 above in a.m., 11 in p.m.

On the 3rd left King's roadhouse at 6 a.m., had lunch at Stone's roadhouse and arrived at Dominion detachment at 3 p.m., distance travelled 29 miles, weather 20 above in a.m., 15 in p.m.

On the 4th left Dominion detachment at 7 a.m., had lunch at Hunker. Constable West played out between Dominion and Hunker and I did not wait for him, but gave him orders to get into Hunker as soon as possible. He just arrived at the detachment as I was leaving. I arrived at Dawson at 8 p.m., Cardinal arriving at 10.30 p.m., and Constable West on the 7th.

I think the route taken this year is far better than the one followed last year, as there is plenty of wood for camping purposes and lots of game.

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With the exception of Staff-Sergt. Fitzgerald and Constable Walker having cramps a couple of days, and Constable Forrest freezing his hand, the health of the party was excellent.

Cardinal and Moore are both good men, but Cardinal is of a very sulky disposition. Indian Sam, while not a first-class guide, proved himself to be a good willing worker. Constable Walker is far from being a good trail man. Constable West was absolutely useless as a dog driver, musher or in fact at anything in connection with a trip of this nature. Constable Forrest, is, in my opinion, the best all-around man I ever saw, being equally good as a dog-driver, musher, trail-breaker, hunter, and general handy-man around camp, and it was thanks to him and Cardinal that we had plenty of fresh meat during the trip and more especially during the time we were short of rations.

Constable Forrest and Indian Sam left Macpherson on their return trip with 25 pounds of mail from Herschell island on March 13, arriving in Dawson on the 6th April. He reports having met with no mishaps and nothing of especial mention, having followed my trail all the way.

In my opinion Constable Forrest is a better man for a long patrol of this kind than Cardinal and Indian Sam together, and if another patrol is made next year, I would respectfully suggest that only policemen be employed, as better work can be accomplished in less time than when a police patrol is accompanied by civilians.

I have the honour to be, sir,

Your obedient servant,

H. G. MAPLEY, Corporal, Reg. No. 2628.

In charge Fort Macpherson Patrol.

APPENDIX F.

ANNUAL REPORT OF SURGEON L. A. PARE, M.D., WHITE HORSE.

WHITE HORSE, Y.T., October 31, 1906.

The Officer Commanding,

'H' Division, R.N.W.M. Police,

White Horse, Y.T.

SIR,—I have the honour to submit herewith my annual medical report for the eleven months ending October 31, 1906:—

During the past year we have had no deaths to report, this making the eighth year in succession.

The general health of the division has been good during the past period, and I am pleased to report that there have been no cases of a contagious or epidemic nature, which tends to confirm my statement of 1904, that 'this territory, and this district in particular, is so favourably situated as to its atmospheric and general sanitary conditions as to be free, or almost so, from any infectious diseases.'

The low temperatures of the far north are recognized to be healthful by most authorities, who claim that only a small number of the pathogenic micro-organisms are capable of maintaining their existence and the activity and reproduction of these survivors are markedly lessened, in my opinion, by the conditions that obtain: for instance during the summer, the prolonged hours of sunlight—the most powerful of germ destroyers—the high elevation—over two thousand feet above sea level—the perfectly pure air currents, and during the winter the intense cold, are such adverse conditions that they should necessarily prove fatal to most disease germs.

It has been demonstrated that the conditions are quite unfavourable to the development, existence and multiplication of such germs and the fact of the few epidemics and contagious cases that have manifested themselves, none spread, none were reproduced here.'

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The two most serious cases during the eleven months were as follows:—

The first of colitis, one of our constables, who made a good recovery after eighteen (18) days in hospital.

The other, a destitute Afghan, suffering from gastro enteritis, and is still under treatment at present. This man seems to be greatly predisposed to troubles of bowels and stomach, this being the second time during a short period that he has been brought to our hospital for treatment for such troubles. He is greatly debilitated by privations, which make his condition very precarious, however, he seems to be making some progress towards recovery.

A number of Indian cases are treated during every month, but the conditions under which these people live are so wretched, that it is almost impossible to give much permanent relief.

We have had a new floor upstairs and a front porch put in the hospital, both of which were much needed and improve both the appearance and comfort of the building.

Though I greatly approve of sending our serious cases to the town hospital—thus obviating the difficulty of getting expert nursing, I would very strongly recommend that all simple cases, which only require a few days treatment in hospital without any expert nursing, be still treated in our own hospital ward. This would be more economical and would be much better, both for the patient and the ends of the service.

A tabulated list of cases treated during the period of the past eleven months is appended.

I have the honour to be, sir,

Your obedient servant,

L. A. PARE, *Surgeon*.

RETURN OF CASES TREATED DURING THE ELEVEN MONTHS ENDED OCTOBER 31, 1906.

Disease.	Number of cases.	Average duration.	Remarks.
Angina pectoris....	2	7	Recovered, returned to duty.
Bags	1	7	A special constable left for outside.
Beating finger.....	3	6	Recovered, returned to duty.
Blepharitis.....	2	3	
Bloodiness.....	2	7	
Proctitis.....	2	7	
Coughs and colds.....	18	3	
Colitis.....	1	18	
Conjunctivitis.....	2	1	
Contusions.....	6	6	
Dermal discoloration.....	1	1	
Delirium tremens.....	1	3	A prisoner, recovered.
Diarrhoea.....	2	2	Recovered, returned to duty.
Eczema.....	1	8	
Foreign body in eye.....	1	8	
Functional disturbances.....	8	2	
Gastro enteritis.....	1	13	A destitute, still under treatment.
Gastric disturbances.....	6	1	Recovered, returned to duty.
Gonorrhoea.....	1	4	
Insomnia.....	1	1	
Lumbago.....	3	3	
Nausea.....	1	1	
Nervousness.....	1	1	
Neuralgia.....	2	2	
Oedema.....	1	14	
Rheumatism.....	8	1	
Shock.....	1	7	
Sore throat.....	2	1	
Sore lips.....	1	4	
Strains and sprains.....	10	2	
Toothache and tooth extraction.....	7	3½	
Tumours eyelid.....	1	4	
Varicocele.....	1	1	An old case, acquired previous to joining.
Wounds (various).....	4	3½	Recovered, returned to duty.

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APPENDIX G.

ANNUAL REPORT OF ASSISTANT SURGEON W. E. THOMPSON, M.D.,
DAWSON.

DAWSON, Y.T., October 31, 1906.

Officer Commanding,
'B' Division R.N.W.M.P.,
Dawson, Y.T.

SIR,—I have the honour to forward my report for the year ending October 31, 1906.

The general health of the division for the past year has been very good. The total number on the sick report being 107, of these 35 were taken into hospital and, with the exception of Reg. No. 4197, Constable Farrow, all have recovered.

Reg. No. 3857 Corporal Mousseau, was accidentally shot August 18, on the civilian rifle range, the bullet entered the back close to the spine and passing through the left kidney, left the body in the mid axillary line; the wound was very severe, and serious symptoms appearing, the patient was sent to St. Mary's hospital and operated upon, he made a good recovery and was returned to duty September 2.

Reg. No. 4226, Constable Grey, was admitted to hospital February 2 suffering from badly frozen feet and hands; it was found necessary to amputate several toes also the second and third fingers on right hand at second phalanx; his recovery was very slow, and for a time it was feared that further amputations would be necessary, but the injuries gradually healed and he was returned to duty on July 31.

Reg. No. 4197, Constable Farrow, was found to be suffering from some form of mental trouble, and being unfit for further service, he was discharged and sent out of the country.

The police hospital has been closed and arrangements made with the city hospitals to receive police patients.

Assistant Surgeon Madore, having been transferred, the medical stores at Fort Selkirk were shipped to Dawson, sufficient drugs being left with the non-commissioned officer in charge of that detachment to treat simple ailments among the Indians. The surplus medical stores at Dawson, Y.T., have been disposed of according to instructions.

The health of the prison department has been very satisfactory, no cases of a serious nature occurred and very few prisoners were placed off work. During the year 16 insane persons were under confinement—15 males and 1 female—9 were sent to New Westminster asylum, the other 7 recovered and were discharged.

The Indians in this district receive medical attention when required; there is still a lot of sickness amongst them, but everything possible is done for them.

The barracks are in a good sanitary condition, buildings warm and comfortable.

I have the honour to be, sir,
Your obedient servant,

W. E. THOMPSON,
Assistant Surgeon.

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CLASSIFIED LIST OF CASES TREATED AT 'B' DIVISION, DAWSON, Y.T., 1906.

Diseases.	Number of cases.	Number of days.	Average duration.	Remarks.
Abscess.....	2	9	4½	Recovered.
Abscess, dental.....	1	1	1	..
Alcoholism.....	2	8	4	..
Bronchitis.....	1	3	3	..
Biliousness.....	3	6	2	..
Backache.....	2	1	1	..
Boils.....	1	1	1	..
Catarrh.....	1	1	1	..
Colds (slight).....	20	20	1	..
Colds (severe).....	13	65	5	..
Constipation.....	1	1	1	..
Carbuncle.....	1	5	5	..
Colic.....	6	12	2	..
Conjunctivitis.....	1	3	3	..
Chafe.....	3	3	1	..
Dislocation.....	1	14	14	..
Dyspepsia.....	1	1	1	..
Diarrhoea.....	1	1	1	..
Earache.....	3	3	1	..
Frost bites.....	1	201	201	..
Flatulence.....	1	1	1	..
Gonorrhoea.....	1	5	5	..
Hemorrhoids.....	3	15	5	..
Headache.....	2	2	1	..
Indigestion.....	1	1	1	..
La grippe.....	2	14	7	..
Lumbago.....	2	8	4	..
Mental.....	1	7	7	Discharged, unfit for service.
Pain in side.....	1	30	30	Recovered.
Rash (simple).....	3	3	1	..
Rheumatic pains.....	2	6	3	..
Sore eyes.....	2	7	3½	..
Sore throat.....	2	4	2	..
Sore lips.....	2	2	1	..
Stricture.....	2	2	1	..
Sprain.....	3	6	2	..
Synovitis.....	1	7	7	..
Toothache.....	2	2	1	..
Wound, contused.....	4	12	3	..
Wound, incised.....	2	6	3	..
Wound, punctured.....	1	4	4	..
Wound, gunshot.....	1	42	42	..
Total number.....	107			

APPENDIX H.

ANNUAL REPORT OF VETERINARY STAFF-SERGEANT G. M. ACRES,
V.S., DAWSON.

DAWSON, Y.T., October 22, 1906.

The Officer Commanding,
'B' Division R.N.W.M. Police,
Dawson, Y.T.

SIR,—I have the honour to submit this my annual report for the year ending this date.

The general health of the horses in this division has been very good, only one death occurring during the year; this was horse Reg. No. 2707, who died on his way from Sulphur detachment to Dawson, suffering from azoturia. Mare Reg. No. 2696 being unfit for further service was destroyed and the carcass used for dog feed. In July last the following horses, being found unfit for police duty, were cast and sold: Reg. Nos. 98, 2605, 2729, 2905 and 2909. In August the following seven head were

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sold, their services being no longer required in the division: Reg. Nos. 52, 2856, 2857, 2901, 2902, 2933 and 2942; these were all fairly good horses and brought good prices. On the 6th of this month Reg. Nos. 89, 2544 and 2922 were disposed of for the same reason as the above seven, but owing to the lateness of the season they did not realize such good prices as the former. The total loss for the past year has been as follows: Died 1, destroyed 1, cast and sold 5, sold, services no longer required 10, total loss 17. Total strength last year was 37; the total strength of the division at the present time is 20, all of which are in good health and condition. Tuberculosis was discovered to exist in four of the cows in barracks last spring; these animals were destroyed and on post-mortem examination well marked clinical symptoms were found. They were replaced by four others imported from Vancouver, all of which were tested before shipment and reported free from tuberculosis. The stables in the division are all in good repair for the coming winter. The drugs and instruments supplied are of good quality. The oats supplied by the contractor are of a good quality. The hay supplied by the contractor this year, with the exception of a few tons, is not of a first-class quality of timothy hay.

Attached is a list of cases treated for the past year.

I have the honour to be, sir,

Your obedient servant,

G. H. ACRES,

Veterinary Staff-Sergeant.

SUMMARY OF CASES TREATED FOR THE YEAR 1906.

Disease.	Number of cases.	Average duration.	Remarks.
Shoulder galls.....	5	4 $\frac{1}{2}$	Cast and sold.
Punctured wounds.....	3	12 $\frac{1}{3}$	
Pleurisy.....	1	43	
Sprains.....	3	7	
Bruises.....	2	15	
Malaria.....	1	15	Died.
Lacerated wounds.....	4	23 $\frac{1}{4}$	
Azeturia.....	1	9 $\frac{1}{4}$	
Nail pricks.....	5	1	
Colic.....	1	7	
Cystitis.....	1	12	Sold.
Bruised feet.....	2	5	
Caulks.....	5	4	
Side bones.....	1	6	
Bruised heel.....	1	7	
Scalds.....	2	4	Cast and sold.
Contused wounds.....	1	24	
Spavin.....	1	5 $\frac{1}{2}$	
Cracked heels.....	2	30	
Influenza.....	1		

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APPENDIX J.

ANNUAL REPORT OF VETERINARY STAFF SERGEANT R. M. NYBLETT,
WHITE HORSE.

WHITE HORSE, Y.T., October 31, 1906.

The Officer Commanding,
'H' Division R.N.W.M. Police,
White Horse, Y.T.

SIR.—I have the honour to submit this my annual veterinary report for the year ending this date:—

The general health of the horses in this division for the past year has been good, no cases of contagious disease have occurred and very few serious cases of illness, but at times it has been difficult to keep the horses in good condition and wind.

During the year there were five deaths among the horses, one died suddenly while on the trail to Kluahne; I cannot state the cause of death but I think it must have been due to acute colic, I did not personally see the animal; the others were destroyed on account of old age, two owing to injuries received, and one which became exhausted on the trail between Atlin and Hazelton, British Columbia, owing to the difficult nature of the country and poor feed. Of the two which were destroyed on account of injuries, one fell on hard ground and fractured the pelvic bone and the other as the result of an injury received the year before became so weak in one shoulder that for a long time he was of very little use, and finally got down while at Livingstone creek and was unable to rise.

All other horses which were sick or injured during the year made good recoveries except Reg. No. 2465, which suffers from 'heaves' and while fit for light use is not likely to make a permanent recovery.

At present only two horses are on the sick list and these I expect to be well in a few days as they are neither of them serious cases.

Five horses and three ponies were cast and sold during the year.

The stables in the division are in serviceable order.

The shoeing during the year has been satisfactory.

The oats supplied by the contractor have been of good quality, but the hay has been inferior.

I have the honour to be, sir,

Your obedient servant,

R. M. NYBLETT,
Veterinary Staff Sergeant.

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SUMMARY OF CASES.

Disease.	Number of cases.	Average duration.	Remarks.
Boils.....	1	4	
Cracked heels.....	3	13	
Cough.....	2	11	
Pulmonary emphysema.....	1	.....	Chronic.
Colic.....	1	2	
Oedema.....	1	15	
Debility.....	2	6	
Laminitis.....	1	16	
Quittor.....	1	9	
Weak shoulder.....	1	.....	Chronic; destroyed.
Quarter crack.....	1	37	
Tender front feet.....	2	9	
Splint lameness.....	1	1	
Wounds and injuries—			
Fracture of ileum.....	1	.....	Destroyed.
Sprains, hip.....	4	14	
Sprains, tendon.....	1	4	
Incised wounds.....	11	12	
Punctured wounds.....	2	10	
Grazed legs.....	1	5	
Burnt heels.....	1	9	
Bruised legs.....	1	5	
Injuries due to collar.....	5	11	
Injuries due to saddle.....	5	10	

DEATHS.

- Reg. No. 2936. Fracture of Ileum. Destroyed.
 “ 62. Old age. Destroyed.
 “ 2928. Weak shoulder. Destroyed.
 “ 2927. Exhaustion. Destroyed on Peace River trail.
 “ 2959. Cause unknown. Died on trail to Kluahna.

